Finding of No Significant Impact (FONSI)
Environmental Assessment for a Gravel Road Training Course Extension
Malmstrom Air Force Base, Great Falls, Montana

Introduction

This Finding of No Significant Impact (FONSI) was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969; the President's Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA, Title 40 of the Code of Federal Regulations (CFR) Parts 1500-1508; and the Environmental Impact Analysis Process, 32 CFR 989. The decision in this FONSI is based upon information contained in the *Environmental Assessment (EA) for a Gravel Road Training Course Extension.*

The purpose of the EA is to determine the extent of environmental impact that may result from proposed improvements at Malmstrom Air Force Base (MAFB) and to evaluate whether these impacts, if any, would be significant. The purpose of the Proposed Action is to provide a realistic driving range to train Airmen in driving safely in challenging conditions that match those throughout the Missile Complex, a 13,800-square-mile area in central Montana. The proposed course addition would include features present in the Missile Complex, such as different road surfaces, cattle guards, and switchbacks. The existing training course does not include these features.

Description of Proposed Action and Alternatives

MAFB proposes to construct and operate a 1-mile extension to the existing Gravel Road Training Course (GRTC) located in the eastern airfield of the installation for a total course distance of 2 miles. The purpose of the proposed GRTC extension is to increase the effectiveness and quality of training for MAFB units in response to *Twentieth Air Force Instruction (AFI) 91-1: Safety – Vehicle Operations for Twentieth Air Force Personnel.*

Construction of the GRTC extension would occur over an approximately 6-month period and would include grading, roadbed foundation, and gravel surfacing, typical of gravel road construction. Course obstacles would include cattle guards, pea gravel surfaces, washboard surfaces, switchback turns, rutted surfaces, narrow bridges, super-elevated corners, fine dust surfaces, steep declines, and railroad crossings. These obstacles would simulate the conditions, obstacles, and hazards found throughout the Missile Complex. The 2-mile course could be driven up to 250 times each month on a year round basis.

Under the No Action Alternative, the GRTC extension would not be constructed. The U.S. Air Force (Air Force) would continue to use the existing 1-mile GRTC constructed in 1998. No improvements would be made to the existing course, and vehicle training would be inhibited because of a lack of realistic obstacles and conditions. The No Action Alternative is carried forward for analysis in accordance with Air Force requirements under 32 CFR 989.8 (d). The Proposed Action is the only alternative that meets the selection criteria, in addition to having no significant adverse effect on the natural or human environment.

Summary of Environmental Consequences

Based on the review of the EA, the Air Force has decided to proceed with the construction of an extension to the existing GRTC. The potential impacts to the human and natural

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14. ABSTRACT
The U.S. Air Force prepared this Environmental Assessment to assess the potential environmental effects that would result from constructing a 1-mile extension to the existing Gravel Road Training Course. The purpose of the Gravel Road Training Course is to provide a realistic driving range to train Airmen in driving safely in challenging conditions that match those throughout the Missile Complex, a 13,800-square-mile area in central Montana. The proposed course addition would include features present in the Missile Complex, such as different road surfaces, cattle guards, and switchbacks. The existing training course does not include these features. The No Action Alternative considers continued use of the existing training course.

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environment were evaluated relative to the existing environment. For each environmental resource or issue, anticipated direct and indirect effects were assessed, considering both short-term and long-term project effects.

During construction and operation, the Proposed Action would result in negligible or no effects to land use, visual resources, floodplains, groundwater, global atmosphere, noise, hazardous materials and waste, solid waste, utilities, environmental justice, and protection of children. During construction, the Proposed Action would provide short-term socioeconomic benefits through the generation of construction jobs.

Minor impacts may result from the Proposed Action to air quality, surface water and stormwater, biological resources, cultural resources, geological resources, traffic and roadways, and safety and occupational health. However, through the implementation of environmental protection measures or best management practices, these impacts would be less than significant.

Overall, the analysis for this EA indicates that the construction and operation of an extension to the GRTC as described under the Proposed Action would not result in or contribute to significant negative direct, indirect, or cumulative impacts to the environment.

Public and Agency Coordination

Agency coordination letters were provided to the United States Fish and Wildlife Service, the Montana Department of Fish, Wildlife, and Parks, and the State Historic Preservation Office. Responses were received from each of these agencies. The United States Fish and Wildlife Service and the State Historic Preservation Office concurred that there would be no likely significant adverse effect resulting from the proposed action. While the Montana Department of Fish, Wildlife and Parks stated they could not officially comment they did state they do not anticipate any natural resource issues that would be negatively impacted.

Copies of this EA and FONSI were made available to the public for review and comment. Copies also have been distributed to Native American tribes in the area and regulatory agencies, and made available to the public for review and comment. No public comments were received.

Conclusion

In accordance with the CEQ regulations implementing NEPA and the Air Force Environmental Impact Analysis Process, the Air Force concludes that the Proposed Action will have no significant impact on the quality of the human environment and that the preparation of an environmental impact statement is not warranted.

SIGNED:

DATE: 5 OCT 2010

STEPHEN L. DAVIS, Colonel, USAF
Malmstrom AFB ESOH Council Chairman

Environmental Assessment for a Gravel Road Training Course Extension

Malmstrom Air Force Base Great Falls, Montana

Contract No. FA8903-08-D-8769

Task Order No. 0087

Submitted to

Air Force Center for Engineering and the Environment
and
Malmstrom Air Force Base

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Cover Sheet

Environmental Assessment

Gravel Road Training Course Extension

Malmstrom Air Force Base, Montana

Responsible Agency: Department of the Air Force

Proposed Action: Construct an extension to the Gravel Road Training Course on Malmstrom Air Force Base, Montana.

For more information, contact: Christopher Murphy, MAFB Environmental Engineer, 341 CES/CEAOP, 39 78th Street North, Malmstrom Air Force Base, MT 59402-7536

Report Designation: Final Environmental Assessment

Abstract: The U.S. Air Force prepared this Environmental Assessment to assess the potential environmental effects that would result from constructing a 1-mile extension to the existing Gravel Road Training Course. The purpose of the Gravel Road Training Course is to provide a realistic driving range to train Airmen in driving safely in challenging conditions that match those throughout the Missile Complex, a 13,800-square-mile area in central Montana. The proposed course addition would include features present in the Missile Complex, such as different road surfaces, cattle guards, and switchbacks. The existing training course does not include these features.

The No Action Alternative considers continued use of the existing training course.

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SECTION 1.0

Project Purpose and Need

This section describes the purpose of and need for the Proposed Action, summarizes the scope of the environmental review, and explains applicable regulatory requirements.

This Environmental Assessment (EA) was prepared in accordance with U.S. Air Force (USAF or Air Force) obligations under the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] §4321 §4370d), the President's Council on Environmental Quality's (CEQ's) NEPA-implementing regulations (Title 40 of the Code of Federal Regulations [CFR] Parts 1500-1508), the USAF NEPA-implementing regulations (32 CFR 989), and Department of Defense (DoD) Instruction 4715.9 (*Environmental Planning and Analysis*).

1.1 Background

Malmstrom Air Force Base (MAFB or Base) encompasses approximately 3,271 acres in Cascade County in west-central Montana (Figure 1-1). The Base lies approximately 0.3 miles east of the city of Great Falls and 75 miles east of the Rocky Mountains. The 341st Missile Wing is the host unit at MAFB. The 341st Missile Wing Deployment Area (Missile Complex) comprises 13,800 square miles surrounding MAFB and includes 150 launch facilities and 15 missile alert facilities spread across nine counties in central Montana.

The U.S. Air Force 341st Civil Engineer Squadron (341 CES) proposes to construct and operate a 1-mile extension to the existing Gravel Road Training Course (GRTC) on MAFB (Figure 1-2). The existing GRTC is approximately 1 mile long and located in the eastern portion of the airfield. The course was developed in 1998 from a gravel maintenance road. The purpose of a GRTC is to simulate the conditions that are encountered when driving from MAFB to the various missile facilities within the Missile Complex.

1.2 Purpose and Need for the Proposed Action

The purpose of the GRTC is to provide a realistic driving range to train Airmen to maneuver safely in challenging conditions that match those found throughout the Missile Complex. Launch facilities and missile alert facilities are located throughout the expansive Missile Complex. The existing GRTC was established in 1998 in response to accidents and safety hazards occurring between the installation and facilities within the Missile Complex. The current course, approximately 1 mile in length, followed existing maintenance roads in the MAFB airfield. This course does not include the range of hazardous features encountered throughout the Missile Complex. These include diverse road surface materials and road widths, switchbacks and sharp turns, narrow bridge crossings, cattle guards, railroad tracks, and variations in elevation. The proposed GRTC extension would include such features and is needed to increase the effectiveness and quality of training for MAFB units in response to Air Force Instruction (AFI) 91-1: *Safety – Vehicle Operations for Twentieth Air Force Personnel* (USAF, 2008).

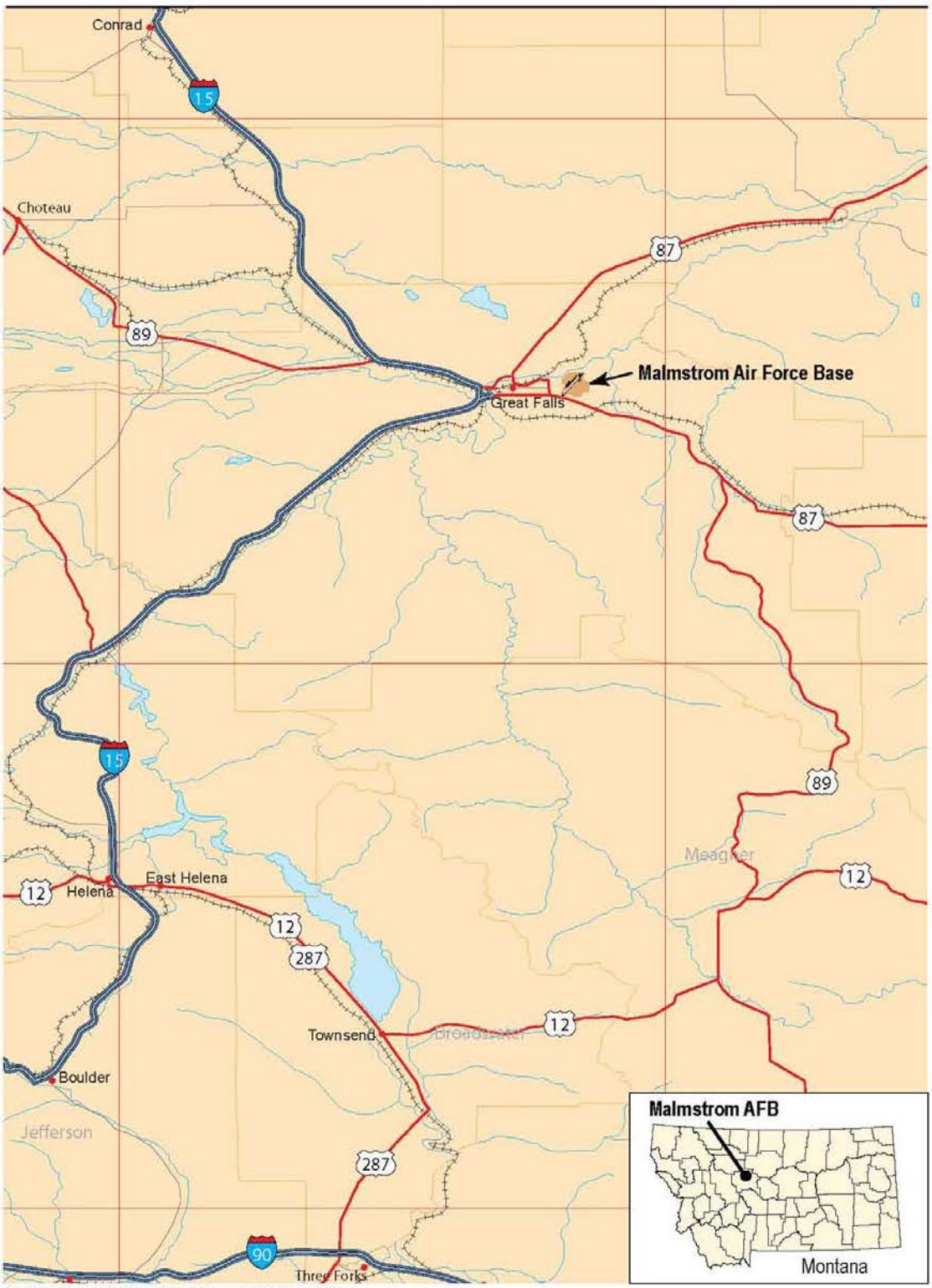

FIGURE 1-1
Location of Malmstrom Air Force Base
Environmental Assessment for GRTC Extension, Malmstrom AFB

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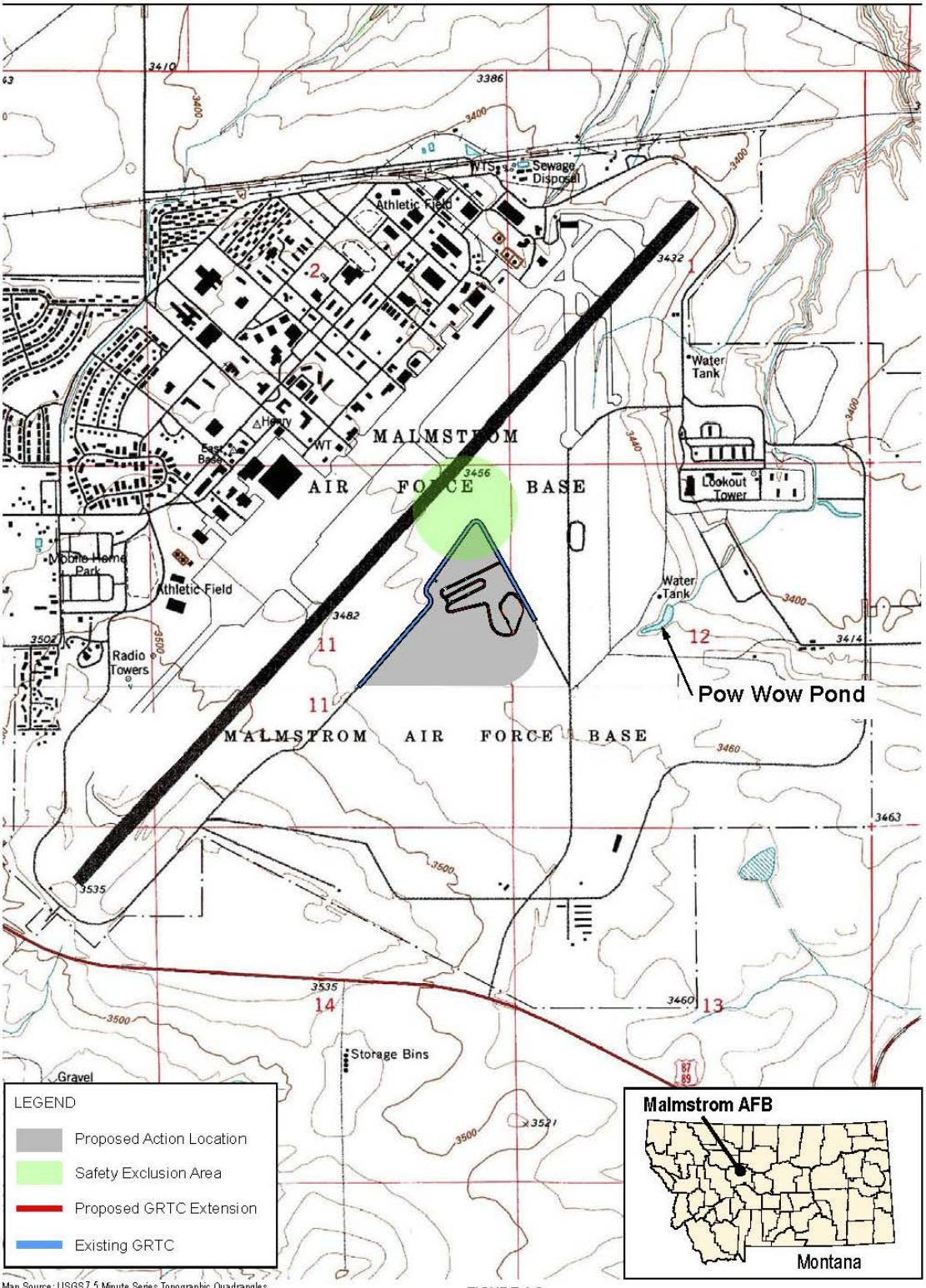

FIGURE 1-2
Proposed Action Location
Environmental Assessment for GRTC Extension, Malmstrom AFB

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1.3 Objectives of the Action

The objective of the Proposed Action is to build a GRTC extension that must perform as follows:

- Meet the training requirements in accordance with AFI 91-1 (USAF, 2008);
- Provide a realistic vehicle training environment, which includes obstacles and hazards found in the Missile Complex;
- Be practical for use by USAF ground vehicles
- Be accessible year round; and
- Be situated within the MAFB boundaries and compatible with adjacent land uses.

1.4 Resource Issues

In order to focus the analysis on the key issues and impacts specific to the project, the resource areas are divided into two groups: resources analyzed in detail and resources eliminated from further analysis.

1.4.1 Resources Analyzed in Detail

Resources studied in detail are defined as those resources that would be directly, indirectly, or cumulatively affected by implementing the Proposed Action. This EA evaluates potential impacts to the following environmental resource areas:

- Air Quality
- Surface Water and Stormwater
- Biological Resources and Wetlands
- Cultural Resources
- Geological Resources
- Traffic and Roadways
- Safety and Occupational Health

1.4.2 Resources Eliminated from Further Analysis

Resources eliminated from further study either are not present at the project site or the project would result in negligible potential impacts to these environmental resources. Resources that would fit this definition are listed below with an explanation why they are not discussed further in this EA.

Land Use: The MAFB *General Plan* (MAFB, 2004) and the MAFB *Land Use Compatibility Study* (MAFB, 2007) guide land use at MAFB. The *General Plan* (MAFB, 2004) categorizes the manner in which land is used, which is an important component for future planning. MAFB has defined several land use categories, including Administration, Aircraft Operations, Airfield, Community, Housing, Industrial, Medical, Open Space, and Outdoor Recreation. Fixed-wing flying operations were halted in January 1997 as a result of Base Realignment and Closure (BRAC) decisions. However, flight line facilities, including the airfield, are

maintained through adaptive reuse while reserved for potential flying mission reinstatement (MAFB, 2004). The Proposed Action would be located in the eastern portion of the airfield and within a designated Open Space area. The MAFB *Land Use Compatibility Study* (MAFB, 2007) outlines standards and restrictions to avoid potential conflicting land uses on MAFB and the surrounding area. Current land uses adjacent to the project site include grassland, a bivouac site, launch facility training site, fire control training, and horse grazing.

The northeastern portion of the project site layout coincides with an existing Safety Exclusion Zone (SEZ) arc. A SEZ is the standoff distance requirement from a potentially hazardous use on an installation (e.g., explosive handling or storage). The area east of the project site location has been used for air shows, helicopter training, and aerial bombing. Although these activities have not occurred in more than 10 years (Nathe, 2009), the SEZ remains designated in the unlikely event that an air show is conducted. In such a case, training would not occur on the GRTC during the event and any activities associated with the air show would not affect the training course (Nathe, 2009). The air shows are not considered an incompatible adjacent land use. See Section 3.8, Safety and Occupational Health, for further analysis of safety measures associated with this exclusion zone. The GRTC extension would be constructed in an area where it would not conflict with adjacent uses. Because the Proposed Action is consistent with these plans and guidelines, land use is not evaluated further.

Visual Resources: The Proposed Action would not substantially change the visual character of the area. All construction would occur at or near ground level in a flat area and no new structures would be erected that could substantially or adversely affect the view. Therefore, impacts to visual resources were eliminated from further analysis.

Floodplains: Executive Order (E.O.) 11988 requires federal agencies, including MAFB, to reduce the risk of flood loss, minimize the impact of floods on human safety, health, and welfare, and restore and preserve the natural and beneficial values served by floodplains. MAFB is located in a high plateau south of the Missouri River. Previous studies indicate that the Base is approximately 100 feet above the 100-year floodplain (MAFB, 2004). Because the GRTC extension would not be constructed in a floodplain, further discussion of impacts to floodplains is eliminated from detailed analysis.

Groundwater: MAFB has both shallow and deep groundwater. The shallow groundwater is thought to be due to both geologic makeup and human activities (trenching and filling (MAFB, 2004). Shallow groundwater can be found on Base at depths ranging from 3 feet to approximately 20 feet (MAFB, 2004). Because of the limited supply of water and the discontinuous nature of this shallow aquifer, it is unlikely it would be used as a water source in the future. Deep groundwater sources on the Base are the Kootenai aquifer (approximately 150 to 200 feet deep) and the Madison Swift aquifer (approximately 450 to 500 feet deep) (MAFB, 2004). Because of the shallow depth of construction, primarily consisting of surficial grading and resurfacing with gravel, groundwater is not expected to be encountered or affected during construction. Groundwater, therefore, was eliminated from detailed analysis.

Global Atmosphere: On a global basis, the Proposed Action would release negligible quantities of recognized greenhouse gas (GHG) pollutants, including methane (CH_4),

nitrous oxide (N_2O), and carbon dioxide (CO_2). As for effects on global warming, the overall Proposed Action would release a small quantity of greenhouse gases during construction. These emissions would be small compared to human-induced releases within the region and the State of Montana. No federal standards currently exist to determine the significance of the cumulative impacts from GHG emissions. Because the project will not continually emit GHG pollutants and the amount generated during construction is very small relative to the emissions from regional and statewide sources, this project would not have a significant impact on global warming.

Noise: Noise generated during construction as a result of implementing the Proposed Action would consist primarily of construction equipment. However, the work would occur in the vicinity of the eastern airfield where the closest sensitive noise receptor would be intermittent recreational users at Pow Wow Park, located approximately 1,600 feet east of the proposed GRTC extension area. Construction noise would be generated only during the 6-month period of ground disturbance. Noise levels on MAFB result primarily from helicopter operations, firing range activities, vehicle traffic, or ongoing construction and maintenance activities. Construction noise associated with the GRTC extension should not exceed current installation activities and, therefore, would not substantially change existing noise conditions. Operation of the proposed GRTC is not expected to alter current noise levels noticeably beyond those experienced from current operation of the training course. Because construction noise would be temporary and operational noise would be similar to current conditions, noise effects associated with implementation of the Proposed Action were eliminated from detailed analysis.

Hazardous Materials and Waste: Pursuant to the MAFB *Hazardous Waste Management Plan* (MAFB, 2006a), hazardous materials include chemicals, dyes, gases (compressed and liquefied), pest control agents, cleaning and polishing compounds, paints, varnishes and related materials, preservatives and sealing compounds, adhesives, fuels (solid), liquid propellants, fuel oils, and oils and greases (e.g., for cutting, lubricating, hydraulics). The *Hazardous Waste Management Plan* (MAFB, 2006a) identifies hazardous waste management and reduction strategies, such as improved housekeeping and substitution of nonhazardous products for hazardous materials; it also addresses spill prevention and cleanup. The Proposed Action would require minimal use of hazardous materials during construction and operation (primarily vehicle fuel), and would not result in the generation of hazardous waste. All hazardous materials associated with the Proposed Action would be managed in accordance with the *Hazardous Waste Management Plan* (MAFB, 2006a) and applicable regulations. Because only minimal adverse impacts are anticipated with implementation of the *Hazardous Waste Management Plan* (MAFB, 2006a) and adherence to all applicable regulations, hazardous materials and wastes are not evaluated further in this EA.

Solid Wastes: Minimal solid waste would be generated during construction of the GRTC extension. The construction contractor would be required to comply with all MAFB requirements for solid waste management and disposal. Because construction and operation practices would conform to MAFB solid waste programs (MAFB, 2003), the impact would be negligible.

Utilities: The Proposed Action would not require the installation or use of additional utilities, and there would be no increased demand on existing utilities. Therefore, impacts on utilities were eliminated from further analysis.

Socioeconomics: Existing personnel would operate and maintain the proposed GRTC extension. There are adequate construction resources within the installation, the local workforce, and outside contractors to complete the construction of the GRTC extension, and no recruitment of additional construction workers would be needed. Because the existing workforce is adequate for construction and operation of the existing and proposed GRTC, use of the GRTC extension would neither affect the number of personnel at MAFB nor the local workforce, population, or housing. There would be no effect on the local community or economy resulting from operation of the project.

Environmental Justice and Protection of Children: E.O. 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,* requires federal agencies, including MAFB, to consider potential effects of their actions on minority and low-income populations. The Proposed Action would occur within MAFB boundaries and would not affect surrounding communities, including minority and low-income populations. Additionally, as noted above, no adverse socioeconomic effects are anticipated for any population, including minority and low-income populations.

E.O. 13045, *Protection of Children from Environmental Health Risks and Safety Risks,* requires government agencies to address disproportionate risks to children that result from environmental health or safety risks. The location of the Proposed Action is in an active military training area and away from areas where children are present (i.e., housing areas, child development centers, or schools). Consequently, there are no anticipated risks to children.

1.5 Applicable Regulatory Requirements and Required Coordination

This EA has been prepared in accordance with CEQ regulations, 40 CFR 1500-1508, as they implement the requirements of NEPA (42 USC 4321 et seq.), and the Air Force Environmental Impact Analysis Process (EIAP) (32 CFR 989). The Air Force EIAP specifies the procedural requirements for implementing NEPA and directs Air Force officials to consider environmental consequences as part of the planning and decision-making process.

Environmental regulatory requirements established under the following statutes, among others, are assessed in the EA:

- Noise Control Act of 1972
- Clean Air Act of 1970
- Clean Water Act of 1972
- National Historic Preservation Act of 1966
- Archeological Resources Protection Act of 1979
- Endangered Species Act of 1973
- Migratory Bird Treaty Act of 1918
- Resource Conservation and Recovery Act of 1976
- Comprehensive Environmental Response, Compensation and Liability Act of 1980

- Toxic Substance Control Act of 1970
- Occupational Safety and Health Act of 1970

Requirements also include compliance with the following Executive Orders (E.O.):

- E.O. 11988, *Floodplain Management*
- E.O. 11593, *Protection and Enhancement of the Cultural Environment*
- E.O. 11990, *Protection of Wetlands*
- E.O. 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*
- E.O. 13045, *Protection of Children from Environmental Health Risks and Safety Risks*
- E.O. 13112, *Invasive Species*
- E.O. 13423, *Strengthening Federal Environment, Energy and Transportation Management*
- E.O. 13175, *Consultation and Coordination with Indian Tribal Governments*
- E.O. 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*
- E.O. 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*

1.6 Organization of the Environmental Assessment

This EA contains all of the required sections of the recommended outline in the CEQ and USAF NEPA-implementing regulations. The document is organized into the following parts:

- ***Section 1.0, Project Purpose and Need,*** provides background information about the installation; the purpose for and need for the Proposed Action; resource issues to be retained and eliminated; applicable regulatory requirements; and a brief description of how the document is organized.

- ***Section 2.0, Description of Proposed Action and Alternatives,*** provides the considered alternatives, screening criteria, and detailed descriptions of the No Action Alternative and the Proposed Action, and screens the alternatives that meet the project purpose and need.

- ***Section 3.0, Affected Environment and Environmental Consequences,*** provides a description of the existing conditions of the environmental resources and analyzes the potential direct, indirect, and cumulative impacts to these resources resulting from the No Action Alternative and the Proposed Action.

- ***Section 4.0, Consultation and Coordination,*** provides a list of agencies/individuals who were contacted for information in the preparation of this document and to whom the EA will be distributed.

- ***Section 5.0, List of Preparers,*** lists the names and qualifications of the document preparers.

- ***Section 6.0, Acronyms and Abbreviations,*** is a list of acronyms and abbreviations used in this EA.

- ***Section 7.0, References,*** provides a listing of the references used in preparing this EA.

SECTION 2.0

Description of Proposed Action and Alternatives

This section identifies and describes the No Action Alternative and the Proposed Action, and discusses alternatives considered but dismissed from further consideration.

2.1 Selection Criteria for Alternatives

To meet the purpose and need of the project, the following criteria were considered in determining whether an alternative for the GRTC extension would be reasonable and viable:

- The training course should include sufficient design and width to facilitate use by USAF ground vehicles.
- The training course should be located contiguous to the existing GRTC.
- The training course should be compatible with adjacent land uses.
- The training course should be long enough to contain all required obstacles and conditions experienced within the Missile Complex.

Reasonable alternatives should accomplish these objectives in a cost-effective manner, with minimal impact to human health and the environment.

2.2 Alternatives Considered but Eliminated from Detailed Study

The Air Force considered a variety of alternatives that may meet the project purpose and need, and fit the selection criteria. Only the Proposed Action was determined to be viable. Other alternatives are discussed here with justification for elimination.

Consideration of Other Locations on MAFB. The proposed GRTC location is the only site on MAFB that is large enough to accommodate the course design with the appropriate width to serve all appropriate vehicles and the appropriate length to include all necessary course objectives without violating incompatible restricted areas of the installation. The site is also contiguous to the existing GRTC and capable of accommodating this type and volume of training without affecting surrounding land uses. Because no other site was viable for meeting the purpose and need of the Proposed Action, only the proposed project site, as defined in Section 2.3.2 and shown on Figure 2-1, was evaluated in this EA.

FIGURE 2-1
Existing and Proposed GRTC Layout
Environmental Assessment for GRTC Extension, Malmstrom AFB

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Consideration of Other Designs. The proposed design, length, and width of the GRTC extension were modeled after an existing GRTC with similar objectives used at Minot Air Force Base (AFB), North Dakota. The design also included all the possible road conditions that may be experienced in the Missile Complex and can be adapted to include environmental, climatic, and traffic conditions. While the proposed alignment may differ slightly from that which is discussed in Section 2.3.2, it would not extend outside of the proposed project area. Because no other design would improve training or reduce environmental impacts, only the proposed project layout and design, as defined in Section 2.3.2, were evaluated in this EA.

Retrofitting the Existing GRTC. While the existing training course is approximately 1 mile in length and has been used since 1998 for similar training, it does not include the necessary conditions needed to provide realistic training for those conditions found throughout the Missile Complex. The course could be engineered to incorporate appropriate road surface materials, elevation variations, bridges, cattle guards, and railroad tracks; however, as currently situated, the existing GRTC does not include the alignment or area for expansion to include switchbacks, sharp turns, corners, or blind turns. The current GRTC also does not allow the space or variation capability to allow adaptation of the course objectives for advanced training. Because retrofitting the existing GRTC would not provide for all required obstacles and conditions experienced within the Missile Complex, this alternative is not considered further in this EA.

2.3 Description of Proposed Alternatives

2.3.1 No Action Alternative

Under the No Action Alternative, the GRTC extension would not be constructed. The USAF would continue to use the existing 1-mile GRTC constructed in 1998 (see Figure 2-1). No improvements would be made to the existing course, and vehicle training would be inhibited because of a lack of realistic obstacles and conditions.

The No Action Alternative is included in the alternatives evaluation as required by CEQ regulations to provide the baseline for evaluating potential environmental impacts of the Proposed Action.

2.3.2 Proposed Action

Under the Proposed Action, MAFB proposes to construct and operate a 1-mile extension to the GRTC. This training course would connect to the existing GRTC for a total course distance of 2 miles. Construction of most of the gravel road would be typical of a standard gravel road, including grading, roadbed, and gravel surfacing.

Heavy equipment would be used to grade the site, move and compact soils, and build obstacles. Construction of the GRTC extension would take approximately 6 months. Equipment and materials used for consecutive days would be staged onsite. The staging area for the Proposed Action would be within the Proposed Action boundaries. Figure 2-1 provides the proposed course layout. Course obstacles would include cattle guards, pea gravel surfaces, washboard surfaces, switchback turns, rutted surfaces, narrow bridges,

super-elevated corners, fine dust surfaces, steep declines, and railroad crossings. These obstacles would simulate the conditions experienced throughout the Missile Complex.

The Proposed Action area is currently a grass-covered field. Although presently vegetated, the project site is considered heavily disturbed due to the dominance of non-native plants, its historic use as a Helicopter Training/Slide area, and its vicinity to the other heavily used areas on the installation. Surrounding activities and operations include a fire training area, launch facility training site, bivouac training site, horse-grazing area, and the airfield.

The GRTC extension would be accessible to a range of ground vehicles. Vehicle passengers would include an instructor and three trainees. The 2-mile course could be driven up to 250 times each month and may include variations along the way including off-course maneuvers within the project area, two-way or parallel travel, or resequencing of course objectives. Training would occur year round in all weather conditions, unless deemed unsafe by the 341st Missile Wing Safety Office. At least once per year, personnel would upgrade the course, add gravel, redefine the shoulders, and replace washboard surfaces.

In addition to MAFB units, the Army, Navy, Montana Highway Patrol, Sheriff's Department, Air National Guard, or other non-government personnel may use the proposed GRTC under the supervision of a certified instructor. Approval would be granted by the installation traffic safety manager and the course use monitored to ensure safety.

SECTION 3.0

Affected Environment and Environmental Consequences

3.1 Air Quality

This section describes the current air quality conditions in the project area and compares these conditions to federal ambient air quality standards to determine the significance of the potential pollutant concentration. The Clean Air Act (CAA) of 1970 requires the Environmental Protection agency (EPA) to identify National Ambient Air Quality Standards (NAAQS) necessary to protect public health and welfare. The EPA has determined that the following seven criteria pollutants influence ambient air quality:

- Carbon monoxide (CO)
- Lead (Pb)
- Nitrogen oxides (NO_x)
- Particulate matter equal to or less than 10 microns in diameter (PM_{10})
- Particulate matter equal to or less than 2.5 microns in diameter ($PM_{2.5}$)
- Ground-level ozone (O_3)
- Sulfur dioxide (SO_2)

The EPA has established atmospheric concentration limits for these seven pollutants. When atmospheric concentrations are below the limits for the pollutants for a defined period, an area is defined as in attainment. If atmospheric conditions are above any of the standards for that defined period, the area is designated nonattainment. Areas previously designated nonattainment, which receive no NAAQS violations over an extended period, may be redesignated as a maintenance area.

For nonattainment regions, states must develop a State Implementation Plan (SIP), designed to eliminate or reduce the severity and number of NAAQS violations. The CAA requires that federal activities demonstrate their conformity with the SIP through a general conformity analysis for projects located in nonattainment or maintenance areas.

Activities that do not exceed regulatory thresholds but result in measurable emission changes would be considered minor to moderate impacts.

3.1.1 Affected Environment

Cascade County is in attainment for all NAAQS with the exception of CO (EPA, 2009a); MAFB is in attainment for all NAAQS. A portion of the Great Falls area was designated as nonattainment for CO in 1980; however, the Great Falls nonattainment area fell below the lowest threshold for moderate areas and was reclassified as a "not classified" maintenance area on November 6, 1991 (Montana, 2000). The city of Great Falls is still in a CO maintenance area along the 10th Avenue corridor, from 2nd Street to 54th Street (EPA, 2009a); this area is outside the boundary of MAFB.

3.1.2 Environmental Consequences

3.1.2.1 No Action Alternative

Because the existing GRTC would not be extended under the No Action Alternative, no changes to air quality are expected.

3.1.2.2 Proposed Action

A minor and temporary increase in fugitive dust emissions (PM_{10} and $PM_{2.5}$) would result from ground-disturbing activities associated with construction and maintenance of the GRTC extension. The potential impacts would be minimal and temporary. Best management practices (BMPs) such as watering and revegetation of disturbed areas would be implemented.

It is expected that there would be minimal and temporary increases in vehicle exhaust emissions (CO, NO_X, SO_2, and PM_{10}) during the construction phase as a result of heavy construction equipment use. The emissions associated with construction would be minimal and temporary.

The number of vehicles accessing the GRTC once it is operational would not increase noticeably compared to the No Action Alternative; however, the amount of time the GRTC is used by these vehicles would increase. Further, the extension would increase the potential training sequences that can be completed in each maneuver. Training-borne vehicle exhaust emissions would not substantially increase above existing emissions because the increase in training would be comparable and would not exceed regulatory thresholds.

Training on the GRTC would likely increase fugitive dust emissions due to the presence of fine dust and other loose substrates. According to Rule 17.8.304 of the Montana Department of Environmental Quality (MDEQ), airborne particulate emissions shall not exhibit opacity of 20 percent or greater averaged over 6 consecutive minutes (MDEQ, 2006). While this rule is not specific to fugitive dust, it provides a guideline for determining the level of impacts. Because the proposed 1 mile of road would be covered primarily with gravel, with less than 10 percent of the area covered with fine dust and other loose substrates, it is not anticipated that this project would result in a significant source of ongoing fugitive dust emissions.

Because the Proposed Action on MAFB would occur in an area in attainment with all NAAQS, a general conformity analysis is not required. Impacts to air quality are expected to be minor to moderate.

3.2 Surface Water and Stormwater

The existing conditions and potential effects on water resources are considered in this section. As discussed in Section 1.4.2, MAFB is not within a floodplain and the proposed activities are surficial and would not encounter groundwater. As such, these resources were eliminated from further discussion. The region of influence (ROI) for water resources is considered to be within the limits of MAFB.

3.2.1 Affected Environment

The Missouri River is the major surface water body in the region and provides potable water to the city of Great Falls and MAFB. The quality of the river water around MAFB is considered good. Perennial streams in the vicinity of the Base flow into the Missouri River. Stream valleys occur throughout the area but these valleys are dry during most of the year.

Surface water or stormwater drainage from MAFB flows through a system of natural drainages to reach the Missouri River (MAFB, 2004). MAFB has authorization to discharge stormwater under two Montana Pollutant Discharge Elimination System (MPDES) general permits: MTR000197 for discharges associated with industrial activity and MTR040008 for discharges associated with the small Municipal Separate Storm Sewer System. The MAFB Stormwater Pollution Prevention Plan (SWPPP) specifies BMPs that minimize the discharge of pollutants into the stormwater system (MAFB, 2006b). Nine surface water drainage basins have been identified on MAFB (Figure 3-1). The project site occurs in Drainage Area 6.

The new draft Municipal Separate Storm Sewer System permit requirements state that by January 1, 2012, projects greater than or equal to 1 acre must infiltrate, evapotranspire, or capture for reuse the first 0.5 inch of rainfall from a 24-hour storm. Compliance with E.O. 13514 requires the Base to implement and achieve objectives outlined in the "Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act (EISA)," EPA document number EPA 841-B-09-001, published in December 2009 (EPA, 2009c). The current 95th percentile rainfall event was determined to be 0.9 inches using methods suggested in the Technical Guidance of Section 438 of the EISA.

3.2.2 Environmental Consequences

3.2.2.1 No Action Alternative

Because the existing GRTC would not be extended under the No Action Alternative, no changes to surface water or stormwater are expected.

3.2.2.2 Proposed Action

Potential impacts to surface water quality from the Proposed Action are primarily associated with stormwater runoff resulting from construction activities and decreased permeability resulting from the removal of vegetation and soil compaction once the GRTC extension is completed. Although much of the GRTC extension would be constructed of pervious material, this analysis assumes a reduced permeability because of the compaction of roadbed materials for a conservative quantification.

The current 95th percentile rainfall event was determined to be 0.9 inches using methods suggested in the Technical Guidance of Section 438 of the EISA. The proposed conceptual roadway length is approximately 1 mile long by 30 feet in width. The stormwater runoff volume from a 1-inch rainfall event would be approximately 10,758 cubic feet, or 3.1 cubic feet per second. Given that this would be a proposed gravel road constructed in a flat area surrounded by grass that drains to Pow Wow Pond, additional stormwater controls would not likely be required.

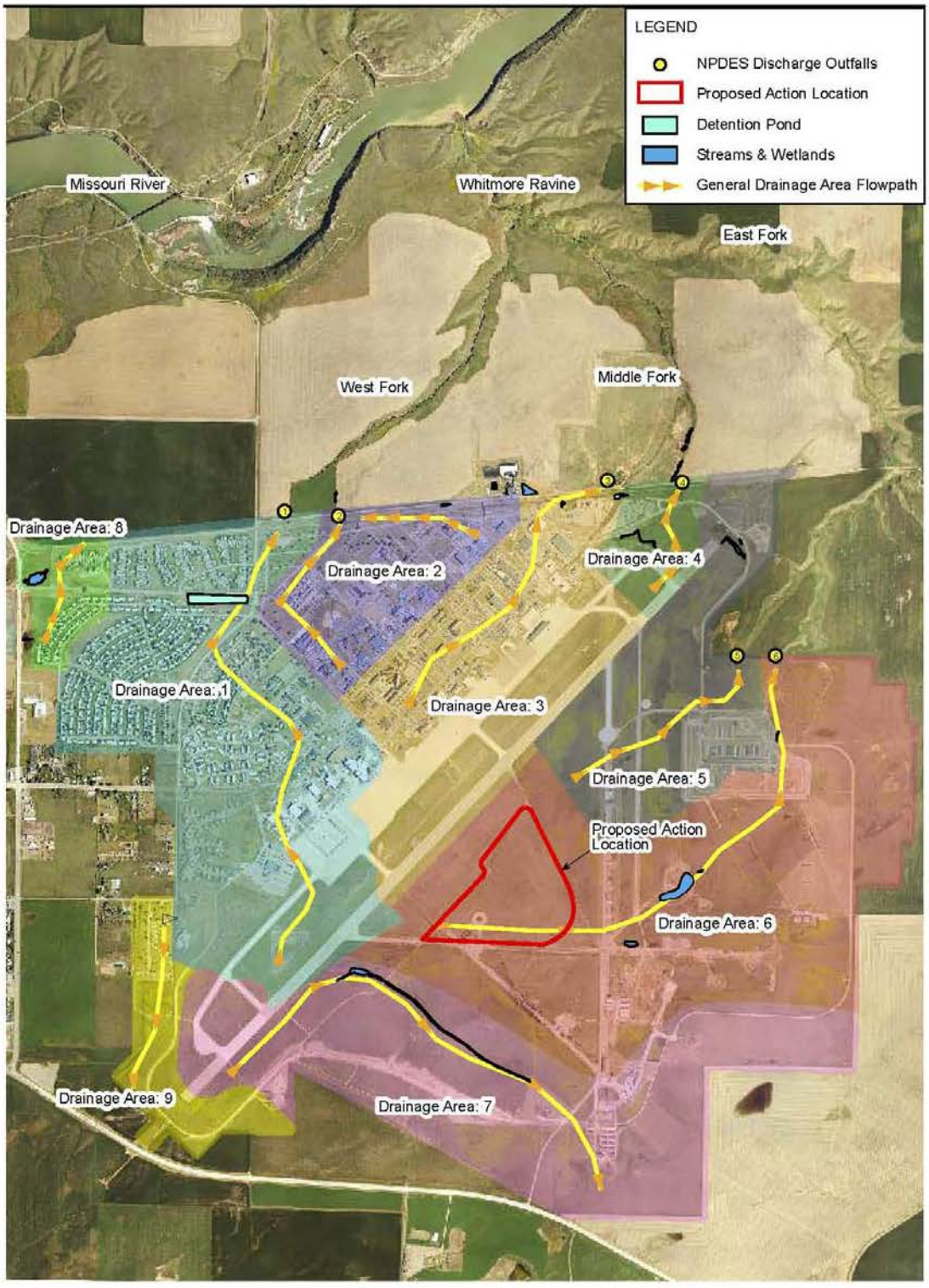

FIGURE 3-1
Malmstrom Air Force Base Drainage Areas
Environmental Assessment for GRTC Extension, Malmstrom AFB

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In accordance with USAF Engineering Technical Letter (ETL) 03-1: *Stormwater Construction Standards* (USAF, 2003) and E.O. 13514 a site-specific SWPPP would be developed and implemented for the construction site. The construction SWPPP would be prepared as part of the project design, including an analysis of potential stormwater generation and contamination, and low-impact development stormwater management and site design techniques. The SWPPP would identify the BMPs to be used (USAF, 2003). Construction BMPs are used at the project site to control erosion and sedimentation, handle spills, and manage waste. Additionally, construction site inspections would be performed regularly and after precipitation events of 0.5 inch or more (USAF, 2003).

In order to reduce the impacts resulting from an increase to compacted and unvegetated surfaces, the GRTC extension would include the implementation of permanent BMPs to minimize erosion, sedimentation, and habitat impacts. BMPs would include revegetation of disturbed areas, implementation of erosion control techniques to keep sediment from leaving the area, and protection of storm drain inlets to prevent sediment from entering storm drains.

Because stormwater and water quality would be managed according to the above-mentioned standards and BMPs, and because no additional stormwater controls are determined to be necessary, the surface water and stormwater impacts associated with the Proposed Action would be minimal.

3.3 Biological Resources

Biological resources on MAFB include the plants, animals, and their habitats on the installation. The MAFB conservation program applies a systematic process for improving biodiversity, invasive species control, and identification of rare and threatened species and natural communities in an effort to preclude negative impacts to populations and ensure suitable natural resources are available to support the military mission. The current conditions and potential effects on biological resources are considered in this section and focus on vegetation, wetlands, and wildlife.

3.3.1 Affected Environment

3.3.1.1 Vegetation

MAFB is located on flat to gently rolling terrain in the northern short grasslands of the United States (Primm, 2001). Most indigenous vegetation within the boundaries and general vicinity of the installation has been replaced with exotic and weedy species over the past 60 years. In the southeast portion of the Base, fields have been plowed and planted with introduced grasses such as crested wheatgrass (*Agropyron cristatum*), Kentucky bluegrass (*Poa pratensis*), and intermediate wheatgrass (*Agropyron intermedium*) (USAF, 2001). Noxious weed populations include spotted knapweed (*Centaurea maculosa*), Canada thistle (*Cirsium arvense*), field bindweed (*Convolvulus arvensis*), leafy spurge (*Euphorbia esula*), dalmation toadflax (*Linaria dalmatica*), Russian knapweed (*Acroptilon repens*), houndstongue (*Cynoglossum officinale*), and hoary cress (*Cardaria draba*) ((North Wind, 2005).

Malmstrom AFB is bordered on the north, east, and south sides by agricultural and pasture lands, with mixed commercial, industrial, residential, and open land uses to the west and northwest. Bird aircraft strike hazard requirements, and bare-ground requirements, have

resulted in regular mowing of grasses on Base, which has contributed to the present composition of vegetation found on MAFB (USAF, 2001). According to the Montana Natural Heritage Program (NHP), six vascular and non-vascular plant species of concern to the state occur within the boundaries of MAFB (NHP, 2010). No federally listed threatened or endangered plant species or potential habitats have been identified on MAFB (USFWS, 2009).

3.3.1.2 Wetlands

There are approximately 5.8 acres of wetlands on MAFB. None of these wetlands are considered jurisdictional by the U.S. Army Corps of Engineers (USACE) because they are isolated wetlands or the wetland does not meet all the criteria to be considered jurisdictional. Nonetheless, these "non-jurisdictional" wetlands do have wetland values and are considered regulated wetlands for the purposes of E.O. 11990 by MAFB (ERG, 2006). E.O. 11990, *Protection of Wetlands*, requires federal agencies, to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands. Section 404 of the Clean Water Act is the regulatory authority governing the protection of wetlands and waters of the United States (US). The USACE has jurisdiction to authorize activities in jurisdictional wetlands or waters of the US.

3.3.1.3 Wildlife

Common mammal species on MAFB include deer (*Odocoileus virginianus*), coyote (*Canis latrans*), red fox (*Vulpes vulpes*), skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), desert cottontail (*Sylvilagus audubonii*), Richardson's ground squirrel (*Spermophilus richardsonii*), eastern gray squirrel (*Sciurus carolinensis*), and deer mouse (*Peromyscus maniculatus*). No native fish occur on the installation; however, Pow Wow Pond contains stocked rainbow trout (*Oncorhynchus mykiss*), brown trout (*Salmo trutta*), and illegally introduced goldfish (*Carassius auratus*) (MAFB, 2002). Primary bird species on MAFB include a variety of songbirds, shorebirds, raptors, and waterfowl (MAFB, 2004).

According to the Montana NHP, one wildlife species of concern, the grasshopper sparrow (*Ammodramus savannarum*), occurs within the MAFB boundaries (NHP, 2009). No federally listed threatened or endangered wildlife species exist on MAFB (USFWS, 2009).

3.3.2 Environmental Consequences

Direct disturbance to biological resources includes excavation and removal of existing habitat. Indirect impacts to biological resources could also result from noise and dust generated during construction.

3.3.2.1 No Action Alternative

Because the existing GRTC would not be extended under the No Action Alternative, no changes to biological resources and wetlands would occur.

3.3.2.2 Proposed Action

The project site is currently vegetated by non-native grassland and a few shrubs. The Proposed Action would result in permanent impacts to vegetation from clearing of the construction area and permanent loss of non-native grassland with construction of the new road. However, the project site is in an area of high disturbance and does not represent high

habitat value. Birds protected under the Migratory Bird Treaty Act may use structures or the grassland habitat within the project area for nesting. Active nests will not be disturbed within the project area. No unique vegetation types are found on the site and the loss of vegetation at the project site would have minor impacts to natural resources on MAFB.

Eight species of noxious weeds occur on MAFB. If any noxious weeds are found on the site during construction or operation, spot weed treatment with hand removal or application of MAFB-approved pesticide will be implemented to reduce their potential spread in accordance with E.O. 13112, *Invasive Species,* and the MAFB Invasive Plant Species Control Plan (North Wind, 2005). Noxious weeds are a concern on dirt piles during construction as dirt piles tend to be the major source of most "weeds" found on base. Any areas disturbed and not required for the GRTC extension would be revegetated. A green cover of rye grass would be used to help control invasive weeds on these areas as rye grass generally out-completes invasive weeds, helps keep the soils in place during wind storms and rains: reducing erosion, and doesn't require watering. Upon final regrading of dirt piles, as the rye grass is "turned" into the soil, it provides increased organic matter thereby improving the soil in it final use. Impacts to vegetation resulting from implementation of the Proposed Action are expected to be negligible.

Wetlands are not present on the project site (ERG, 2006, and MAFB, 2004). The nearest wetland to the project site, which is a non-jurisdictional wetland, is located several hundred feet south of the project area (ERG, 2006). BMPs would be implemented to prevent stormwater from entering the wetland from the GRTC extension (see Section 3.2.2). No impacts are expected to wetlands resulting from implementation of the Proposed Action.

Existing wildlife habitat would be permanently lost as a result of road construction under the Proposed Action. Wildlife that use this area may be temporarily displaced; however, ground squirrels are likely to quickly re-inhabit the area after construction and potentially undermine sections of the GRTC. Direct impacts from mortality to smaller, less-mobile wildlife species could occur during construction if those species are present. However, because the project site has low habitat value and is adjacent to the existing GRTC and subject to human activity, disturbance to wildlife resulting from implementation of the Proposed Action is expected to be minor.

3.4 Cultural Resources

Cultural resources include prehistoric and historic archeological sites, historic structures, and traditional cultural places. A significant cultural resource is a resource that is found to meet criteria for eligibility for inclusion in the National Register of Historic Places (NRHP). In addition, significant cultural resources must possess integrity relative to their original historic features and characteristics.

3.4.1 Affected Environment

The pre-contact, ethnographic, and historic cultural context for MAFB has been restated most recently in the *Installation Cultural Resource Management Plan* (ICRMP) for MAFB (USAF, 2009). While the region's prehistory is well established, significant themes for MAFB itself include historic exploration and settlement, and military history, particularly that of

the Cold War era. A historic railroad and several pre-contact archaeological sites are present on and near MAFB.

3.4.2 Environmental Consequences

3.4.2.1 No Action Alternative

Because the existing GRTC would not be extended under the No Action Alternative, no changes to cultural resources are expected.

3.4.2.2 Proposed Action

No historic or cultural resources are present at the project site. All activities for implementing the Proposed Action would take place in compliance with the ICRMP (USAF, 2009).

In the event that archaeological or paleontological resources are inadvertently found at the project site during construction or operation, the Air Force would proceed in the following manner:

1. Items would be left undisturbed and protected by establishing a 100-foot perimeter around the site and cordoning it off to prevent damage. Remains would not be excavated under any circumstances. No materials would be moved or removed, and the area would be secured.
2. For human remains, MAFB Security Forces would be notified immediately for crime scene determination.
3. The contractor and/or government personnel would notify the MAFB Cultural Resource Manager (CRM) who would determine further steps to be taken.
4. No media or news agencies would be notified by the discoverer.
5. Digital images or any photograph of undisturbed remains would be made available only to the CRM.

Following the procedures set forth in the ICRMP (USAF, 2009), no impacts to archaeological, historic, or cultural resources are anticipated as a result of implementing the Proposed Action.

3.5 Geological Resources

This section presents a discussion of the existing geologic conditions on MAFB and an evaluation of the potential impacts on geology and soils resulting from the Proposed Action.

3.5.1 Affected Environment

MAFB is located over the eastern flank of the Sweetgrass Arch, the dominant bedrock structural feature in north-central Montana. Impervious glacial till is the predominant unconsolidated deposit over bedrock on MAFB. No special qualities are associated with the geology or soils on MAFB. The soil types corresponding to the glacial till parent material are in the Lawther Series, which is predominantly silty clay or clay (MAFB, 2004).

Most of the soils on MAFB are not highly subject to wind or water erosion. The soils at the project site consist of Lawther Series, which is comprised of deep, well-drained, and moderately well-drained soils. Permeability of the Lawther Series is slow and available water capacity is moderate or high (MAFB, 2004).

3.5.2 Environmental Consequences

3.5.2.1 No Action Alternative

Because the existing GRTC would not be extended under the No Action Alternative, no changes to geological resources are expected.

3.5.2.2 Proposed Action

Implementation of the Proposed Action would disturb surface soils and permanently change the ground surface from a vegetated surface to a gravel surface. The soil could erode as a result of development activities, such as grading and excavation. However, BMPs would be implemented in accordance with the Construction SWPPP (refer to Section 3.2) to minimize impacts associated with soil erosion. These BMPs would include, but not be limited to, installation of silt fencing and sediment traps, and revegetation of disturbed areas, as appropriate. Construction would cause short-term erosion under the Proposed Action; however, this impact would be minor with the employment of BMPs, as outlined in the SWPPP.

3.6 Traffic and Roadways

This section discusses the transportation on MAFB, focusing on traffic patterns and roadways that may be affected by construction or operation of the Proposed Action.

3.6.1 Affected Environment

MAFB can be approached from U.S. Highway 87/89, east of Interstate 15 (see Figure 1-1). The Main Gate on 2nd Avenue North and the Commercial Gate (North Gate) on 10th Avenue North provide access to the installation. Inside the Main Gate, 2nd Avenue North becomes Goddard Avenue, which serves as the main thoroughfare through the developed area of the installation. Goddard Avenue intersects with Perimeter Road, also serving as a main thoroughfare through the developed area and providing further access to the outer areas of the former airfield.

Seventy-five percent of installation traffic enters through the Main Gate, and the remainder enters through the North Gate (USAF, 2006). Peak traffic hours are from 6:45 a.m. to 8 a.m. and 4:30 p.m. to 5:30 p.m. Private vehicles dominate traffic on MAFB, with no public transit available. Training vehicles, construction vehicles, and school buses also use installation roadways (USAF, 2006).

3.6.2 Environmental Consequences

3.6.2.1 No Action Alternative

No new impacts to traffic and roadways are expected under the No Action Alternative because there would be no changes to current conditions resulting from operation or construction of the Proposed Action.

3.6.2.2 Proposed Action

Under the Proposed Action, construction vehicles would access the installation Main Gate and travel south along Perimeter Road. Vehicles would continue on airfield maintenance roads to the project site. All of these roads can accommodate heavy construction vehicles. The increase in traffic from construction vehicles would be temporary (estimated 6 months). Equipment and materials would be staged near the construction site to reduce the number of trips. Because the current transportation infrastructure can accommodate the increase in construction traffic and the impact would be temporary, impacts to traffic during construction would be minor.

Operationally, there would be no impact on the installation because all of the activities would occur on a designated training area and there would be no noticeable increase in the number of vehicles or personnel using the training facility compared to current levels.

3.7 Safety and Occupational Health

This section presents a discussion of the existing safety and occupational health conditions on MAFB, and an evaluation of the potential impacts on safety and occupational health resulting from implementing the Proposed Action.

3.7.1 Affected Environment

Operation and maintenance activities conducted at MAFB are performed in accordance with applicable USAF safety regulations, published Air Force Technical Orders, and standards prescribed by Air Force Occupational Safety and Health requirements (USAF, 2009). The Base implements health and safety procedures, and workers receive regular health and safety training. MAFB Security Police and security contractors enforce traffic safety.

MAFB has designated a number of SEZs throughout the installation (MAFB, 2004). SEZs are off limits during certain activities, such as air shows, helicopter training, and aerial bombing. Although these activities have not occurred in more than 10 years, MAFB maintains the SEZs (Nathe, 2009).

Construction site safety and accident prevention are ongoing activities for all job sites. As part of the contracts for construction services, standard terms and conditions include safety as a priority. Areas of concern include compliance with regulations typical to construction projects, personal protection equipment (PPE) standards, and limited access to the construction area.

3.7.2 Environmental Consequences

3.7.2.1 No Action Alternative

The No Action Alternative would result in a negative impact to safety and occupational health on MAFB. Personnel driving military vehicles would not be adequately trained to respond to the obstacles and hazards common in the Missile Complex.

3.7.2.2 Proposed Action

Military vehicle training activities and construction projects can be inherently dangerous. To reduce risks, applicable rules and regulations regarding safety and occupational health would be followed for both construction and operation of the Proposed Action.

A health and safety plan for construction would be prepared, and construction areas would be secured as necessary to prevent unauthorized individuals from entering the work site. Additionally, in accordance with the Occupational Safety and Health Act, all workers would be provided with appropriate PPE including, but not limited to, approved hard hats, safety shoes, gloves, goggles, hearing protection, and traffic safety vests. The potential for adverse impacts to safety and occupational health during construction would be minimal.

In accordance with AFI 91-1, training on the GRTC would be conducted in a controlled and organized manner. The 341st Space Wing Safety Office would create standardized lesson plans and certify all instructors on the GRTC training curricula, vehicles, and courses. All personnel, regardless of rank, seniority, or position, would ensure safe procedures are practiced and seat belts are worn properly. Vehicle operators would consider safety inputs from any passenger (USAF, 2008).

Furthermore, all GRTC training activities will continue to be coordinated through the Safety Office to ensure that there are no conflicts with the existing SEZ for air shows, which overlaps with the northeastern boundary of the project site. In the event an air show is scheduled, no training would occur at the GRTC at the time of the show.

Operation of the Proposed Action presents a net benefit to safety and occupational health. Individuals trained on the GRTC extension would be more prepared to respond to obstacles and hazards present in the Missile Complex.

3.8 Cumulative Effects

The most severe environmental degradation may not result from the direct effects of any particular action, but from a combination of effects of multiple, independent actions over time. Cumulative impacts are defined by the CEQ as

> *"the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions"* (40 CFR 1508.7).

Cumulative impacts can result from individually minor but collectively substantial actions undertaken over time by various agencies or individuals. Cumulative impacts must occur to the same resources, in the same geographic area, and within the same time frame for the Proposed Action and other projects.

The following analysis includes an evaluation of whether impacts resulting from implementation of the Proposed Action might result in cumulative impacts when considered with past, present, and reasonably foreseeable future actions (projects).

3.8.1 Past, Present, and Reasonably Foreseeable Actions

MAFB is an active military installation that often undergoes change in mission capability and training requirements. This process of change is consistent with the U.S. defense policy that the USAF must be ready to respond to threats to American interests throughout the world.

Since the MAFB runway was decommissioned in 1996 (USAF, 2009), the installation has initiated planning for development in the area east of the airfield and in the vicinity of the project site. Various projects and conceptual plans are being considered, including facility construction and land outgrants for non-DoD land uses. Capital improvements to support these uses include extension of water supply and wastewater utilities into the area east of the airfield. This phased project is expected to be completed in 2011. Stormwater retention/ detention construction in Drainage Area 3 was recently completed and further planning to retain stormwater on MAFB is ongoing.

3.8.1 Analysis of Cumulative Impacts

Construction activities, including the Proposed Action, and continuation of training and installation operations on MAFB would generate noise. Construction due to both the Proposed Action and other ongoing projects would result in a short-term impact on air quality and transportation. MAFB would continue to closely monitor development planning and mission operations to avoid and minimize impacts to stormwater. Facility design would comply with installation stormwater controls to avoid a net increase in peak flow rates and total volume of runoff. The contribution to stormwater runoff from implementation of the Proposed Action would be minor. Development activities, including the Proposed Action, could result in permanent changes to biological resources by removing existing habitat. Neither endangered species nor their habitat would be affected by the Proposed Action. As a result, these impacts are considered minor.

3.9 Summary of Effects

Table 3-1 compares the impacts to environmental resources analyzed in this EA for the No Action Alternative and the Proposed Action, and describes the applicable environmental protection measure(s). Both the resources studied in detail and the resources eliminated from further study are included in the table.

TABLE 3-1
Comparison of Environmental Impacts and Environmental Protection Measures
MAFB GRTC Extension

No Action Alternative	Proposed Action	Environmental Protection Measure
Resources Studied in Detail		
Air Quality		
No change to current conditions.	A minor increase in fugitive dust during construction.	Implement BMPs such as watering and revegetation.
Surface Water and Stormwater		
No change to current conditions.	Stormwater runoff resulting from construction activities.	Contractor would implement construction BMPs to prevent sediment from leaving the site, protect storm drain inlets, control spills, and to inspect the site and document findings.
No change to current conditions.	Runoff resulting from an increase of impervious surface.	Construct BMPs to mimic historical hydrologic conditions, minimize erosion, and revegetate any disturbed areas.
Biological Resources and Wetlands		
No change to current conditions.	Introduction of noxious weeds at the construction site.	Weeds would be spot treated with an MAFB-approved pesticide or removed by hand. Dirt piles will be revegetated with rye grass.
Cultural Resources		
No change to current conditions.	Potential for inadvertent archaeological finds.	Follow MAFB archaeological guidelines.
Geological Resources		
No change to current conditions.	Increased wind and soil erosion potential due to exposed soil at the project site.	Implementation of BMPs, such as silt fencing, sediment traps, and revegetation of disturbed areas.
Traffic and Roadways		
No change to current conditions.	Increased traffic on MAFB due to construction.	Equipment and materials would be staged near the construction site to reduce the number of trips.
Safety and Occupational Health		
No change to current conditions.	Safety risks associated with construction sites.	A *Health and Safety Plan* for construction would be prepared and construction areas would be secured as necessary to prevent unauthorized individuals from entering the work site. Additionally, all workers would be provided with PPE.
Current training risks at the GRTC are similar to the Proposed Action.	Safety risks associated with military vehicle training.	The 341st Space Wing Safety Office would create standardized lesson plans and certify all instructors on the Gravel Road training curriculums, vehicles, and courses. All personnel, regardless of rank, seniority, or position, would ensure safe procedures are practiced and seat belts are worn properly.

TABLE 3-1
Comparison of Environmental Impacts and Environmental Protection Measures
MAFB GRTC Extension

No Action Alternative	Proposed Action	Environmental Protection Measure
No change to current conditions.	Project site is located within the air show SEZ.	The GRTC extension would not be used during air shows.
Cumulative Impacts		
No change to current conditions.	Stormwater management will continue to be an issue on MAFB.	MAFB would continue to closely monitor development planning and mission operations to avoid stormwater impacts. Facility design would comply with installation stormwater controls.
Resources Eliminated From Further Study		
Hazardous Materials and Waste		
No change to current conditions.	The Proposed Action would require minimal use of hazardous materials during construction and operation.	All hazardous materials would be managed in accordance with the MAFB *Hazardous Waste Management Plan* and applicable regulations.
Solid Wastes		
No change to current conditions.	Minimal solid waste would be generated during the construction of the GRTC extension.	The construction contractor would be required to comply with all MAFB requirements for solid waste management and disposal.

SECTION 4.0

Consultation and Coordination

4.1 State and Federal Agencies

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4.2 Tribes

Julia Doney	Fort Belnap Indian Community, President
John Murray	Blackfeet Nation Tribal Historic Preservation Officer (THPO)
Marcia Pablo	Confederated Salish & Kootenai Tribe, THPO
George Reed	Crow Tribe of Montana, NAGPRA Coordinator
Alvin Windy Boy	Rocky Boys Reservation, THPO
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SECTION 5.0

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The following individuals contributed to the preparation of this EA.

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SECTION 6.0

Acronyms and Abbreviations

341 CES	341st Civil Engineer Squadron
AFB	Air Force Base
AFI	Air Force Instruction
Base	Air Force Base
BMP	best management practice
BRAC	Base Realignment and Closure
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CRM	Cultural Resource Manager
DoD	Department of Defense
CWA	Clean Water Act
E.O.	Executive Order
EA	Environmental Assessment
EIAP	Air Force Environmental Impact Analysis Process
EISA	Energy Independence and Security Act
ETL	Engineering Technical Letter
EPA	Environmental Protection Agency
GHG	greenhouse gas
GRTC	Gravel Road Training Course
ICRMP	Integrated Cultural Resource Management Plan
MAF	missile alert facilities
MAFB	Malmstrom Air Force Base
MDEQ	Montana Department of Environmental Quality
MFWP	Montana Fish, Wildlife and Parks

Missile Complex	341st Missile Wing Deployment Area
MPDES	Montana Pollutant Discharge Elimination System
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHP	Natural Heritage Program
NO_x	nitrogen oxide
NRHP	National Register of Historic Places
O_3	ozone
Pb	lead
$PM_{2.5}$	Particulate matter equal to or less than 2.5 microns in diameter
PM_{10}	Particulate matter equal to or less than 10 microns in diameter
PPE	personal protective equipment
ROI	region of Influence
SEZ	Safety Exclusion Zone
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO_2	sulfur dioxide
SUV	sport utility vehicle
SWPPP	Stormwater Pollution Prevention Plan
THPO	Tribal Historic Preservation Officer
TMT	tabletop maneuver trainer
USACE	U.S. Army Corps of Engineers
USAF	U.S. Air Force
USC	United States Code
USFWS	U.S. Fish and Wildlife Service

SECTION 7.0

References

Ecosystem Research Group (ERG). 2006. *Wetland Delineation Report, Malmstrom AFB MT.* September 28.

Environmental Protection Agency (EPA). 2009a. *The Green Book Nonattainment Areas for Criteria Pollutants*. http://www.epa.gov/air/oaqps/greenbk/index.html. Last updated October 8, 2009.

EPA. 2009b. Wetland Definitions. Updated 14 September 2009. *http://www.epa.gov/owow/wetlands/what/definitions.html.*

EPA. 2009c. *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act (EISA).* EPA 841-B-09-001. December 2009.

Ecosystem Research Group (ERG). 2006. *Wetland Delineation Report, Malmstrom AFB MT.* September 28

Executive Order 13514. *Federal Leadership in Environmental, Energy, and Economic Performance.* October 5, 2009. *Federal Register*, Vol. 74, No. 194, October 8, 2009.

Executive Order 13112. *Invasive Species*. February 3, 1999. *Federal Register*, Vol. 64, No. 25, February 8, 1999.

Executive Order 13045. *Protection of Children from Environmental Health Risks and Safety Risks.* April 21, 1997. *Federal Register*, Vol. 62, No. 78, April 23, 1997.

Executive Order 12898. *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.* February 11, 1994. *Federal Register*, Vol. 59, No. 32, February 16, 1994.

Executive Order 11988. *Floodplain Management*. May 24, 1977. *Federal Register*, Vol. 42, No. 101, February 25, 1977.

Executive Order 11990. *Protection of Wetlands*. May 24, 1977. *Federal Register*, Vol. 42, No. 101, February 25, 1977.

Malmstrom Air Force Base (MAFB). 2007. *Land Use Compatibility Study, Malmstrom Air Force Base.* Great Falls, Montana. November.

MAFB. 2006a. Headquarters 341st Space Wing. *341 SW OPLAN 32-7042, Hazardous Waste Management Plan.* 1 January.

MAFB. 2006b. Headquarters 341st Space Wing. *341 SW OPLAN 32-7041, Stormwater Pollution Prevention.* September.

MAFB. 2004. *General Plan.*

MAFB. 2003. *Solid Waste Management Plan (U) – OPLAN 32-7043*. Malmstrom Air Force Base, Montana. 31 April.

MAFB. 2002. *An Evaluation of the Terrestrial and Aquatic Resources of Malmstrom Air Force* Base. February.

MAFB. n.d. *MAJCOM/Installation Design Guidelines and Standards.*

Montana Department of Environmental Quality (MDEQ). 2006. Administrative Rules of Montana (17-301) - *Environmental Quality,* Chapter 8, Subsection 3: Air Quality – Emission Standards. September 30.

Montana Natural Heritage Program (NHP). 2010. *Species of Concern Data Report.* Custom report generated for MAFB. 27 January.

Nathe, Kelly. 2009. Personal communication with Kelly Nathe, MAFB Field Operations. Kickoff Meeting Discussion. 9 September.

North Wind, Inc. (North Wind). 2005. *Invasive Plant Species Control Plan, Malmstrom Air Force Base, Montana*. May.

Primm, S., et al. 2001. *NA0811* in "Terrestrial Ecoregions of North America: A Conservation Assessment." Island Press. http://worldwildlife.org/wildworld/profiles/terrestrial_na.html.

State of Montana (Montana). 2000. *State of Montana Air Quality Control Implementation Plan, Subject: Cascade County Carbon Monoxide Limited Maintenance Plan.* Chapter 7. December 19.

U.S. Air Force (USAF). 2009. Draft Final *Integrated Cultural Resource Management Plan, Malmstrom Air Force Base*. January 2009.

USAF. 2008. Twentieth Air Force Instruction (AFI) 91-1: *Safety – Vehicle Operations for Twentieth Air Force Personnel*. 1 June.

USAF. 2006. *Draft Environmental Assessment for Constructing a Community Activity Center at Malmstrom Air Force Base, Montana*. December.

USAF. 2003. *Engineering Technical Letter (ETL) 03-1: Storm Water Construction Standards*, issued by Air Force Civil Engineer Support Agency, 24 March.

U.S. Air Force (USAF). 2001. Final Integrated Natural Resources Management Plan, Malmstrom Air Force Base. 341 CES/CEV Malmstrom AFB, Montana. December.

USAF. 2000. Air Force Safety Center Website. http://www.afsc.af.mil. Accessed December 11, 2009.

U.S. Fish and Wildlife Services (USFWS). 2009. *Endangered, Threatened, Proposed and Candidate Species, Montana Counties, Endangered Species Act*. November.

APPENDIX A

Agency and Tribal Letters

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 341ST MISSILE WING (AFGSC)

December 15, 2009

MEMORANDUM FOR: Mr. Gary Bertellotti, Regional Supervisor
Montana Department of Fish, Wildlife, and Parks
4600 Giant Springs Road
Great Falls, Montana 59405

FROM: 341 CES/CEAO
39 78th Street North
Malmstrom AFB, Montana 59402-7536

SUBJECT: Proposed Gravel Road Training Course Extension, Malmstrom Air Force Base (MAFB), Montana

1. MAFB is preparing an Environmental Assessment (EA) for the proposed construction of an extension to the Gravel Road Training Course (GRTC) on MAFB. The EA will analyze the Preferred Action and No Action alternatives (Figure 1).

2. The EA will evaluate potential environmental effects resulting from the proposed construction and operation of a one-mile extension to the existing GRTC. The EA will also examine the potential cumulative impacts from other past, present, and reasonably foreseeable future proposals.

3. Please contact Christopher Murphy, EA Project Manager, Malmstrom AFB at (406) 731-6369 or via email at christopher.murphy@malmstrom.af.mil with any questions or concerns.

CHRISTOPHER J. MURPHY, E.I.
Environmental Engineer

Figure 1: Preferred Site Locations

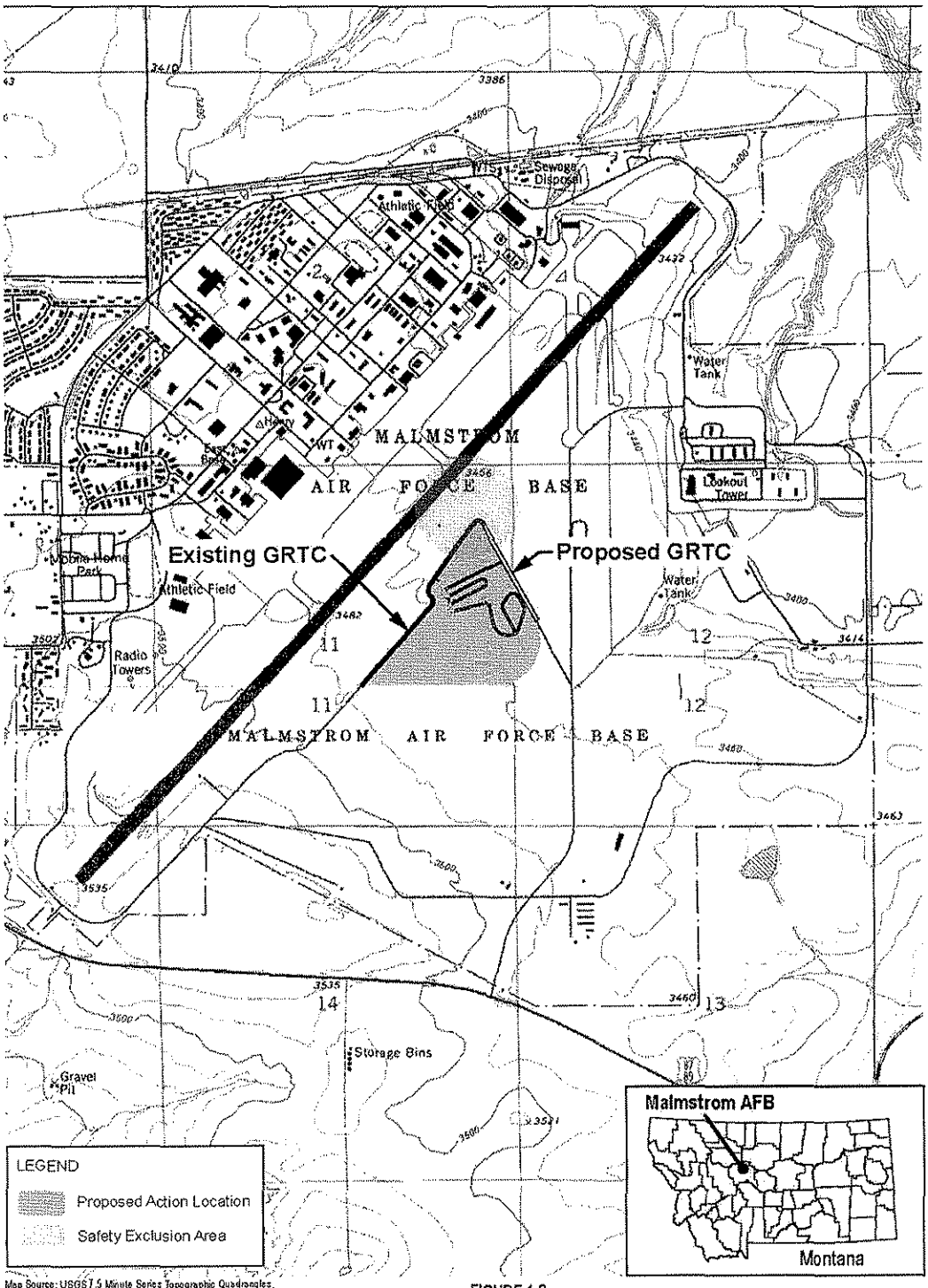

FIGURE 1-2
Proposed Action Location
Environmental Assessment for GRTC Extension, Malmstrom AFB
CH2MHILL

1

Garlinghouse, Leslie/BAO

From: Murphy, Christopher J Civ USAF AFGSC 341 CES/CEAO [christopher.murphy@malmstrom.af.mil]
Sent: Monday, December 21, 2009 2:00 PM
To: Garlinghouse, Leslie/BAO
Subject: FW: Proposed Gravel Road Training Course Extension, Malmstrom AFB
Signed By: christopher.murphy@malmstrom.af.mil

FYI

CHRISTOPHER J. MURPHY, E.I.
Environmental Engineer
341 CES/CEAOP
39 78th Street North
Malmstrom AFB MT 59402-7536

406-731-6369 Fax: 406-731-6181

-----Original Message-----
From: Bertellotti, Gary [mailto:GBertellotti@mt.gov]
Sent: Wednesday, December 16, 2009 2:11 PM
To: Murphy, Christopher J Civ USAF AFGSC 341 CES/CEAO
Subject: Proposed Gravel Road Training Course Extension, Malmstrom AFB

Mr. Murphy,

With out much detail on this proposal I can not officially comment but based on the fact that it is within the boundary of the AFB, Fish, Wildlife & Parks would not anticipate any Natural Resource issues that would negatively impacted by such a development. Please keep us informed and feel free to call or e-mail with any concerns or details you would feel important to share.

Gary Bertellotti
FWP R-4 Regional Supervisor
Great Falls
454-5846

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 341ST MISSILE WING (AFGSC)

December 15, 2009

MEMORANDUM FOR: Mr. Mark Wilson
U.S. Fish and Wildlife Service
Montana Field Office
585 Shepard Way
Helena MT 59601

FROM: 341 CES/CEAO
39 78th Street North
Malmstrom AFB MT 59402-7536

SUBJECT: Proposed Gravel Road Training Course Extension, Malmstrom Air Force Base (MAFB), Montana

1. MAFB is preparing an Environmental Assessment (EA) for the proposed construction of an extension to the Gravel Road Training Course (GRTC) on MAFB. The EA will analyze the Preferred Action and No Action alternatives (Figure 1). The EA will evaluate potential environmental effects resulting from the proposed construction and operation of a one-mile extension to the existing GRTC. The EA will also examine the potential cumulative impacts from other past, present, and reasonably foreseeable future proposals.

2. This EA will analyze the potential effects of this proposed action on environmental resources. Pursuant to the Endangered Species Act and the National Environmental Policy Act, we request information regarding federally listed or proposed species that may be present in the potentially affected area. We would appreciate receiving the information in digital format, if available. We will contact you at a later date to determine the need for a Section 7 consultation. We anticipate a final EA will be made available for public and agency comment in December 2009.

3. Our contractor for this project is CH2M HILL and we would appreciate your cooperation during their data collection efforts.

4. Please contact Christopher Murphy, EA Project Manager, Malmstrom AFB at (406) 731-6369 or via email at christopher.murphy@malmstrom.af.mil with any questions or concerns.

CHRISTOPHER J. MURPHY, E.I.
Environmental Engineer

Figure 1: Preferred Site Locations

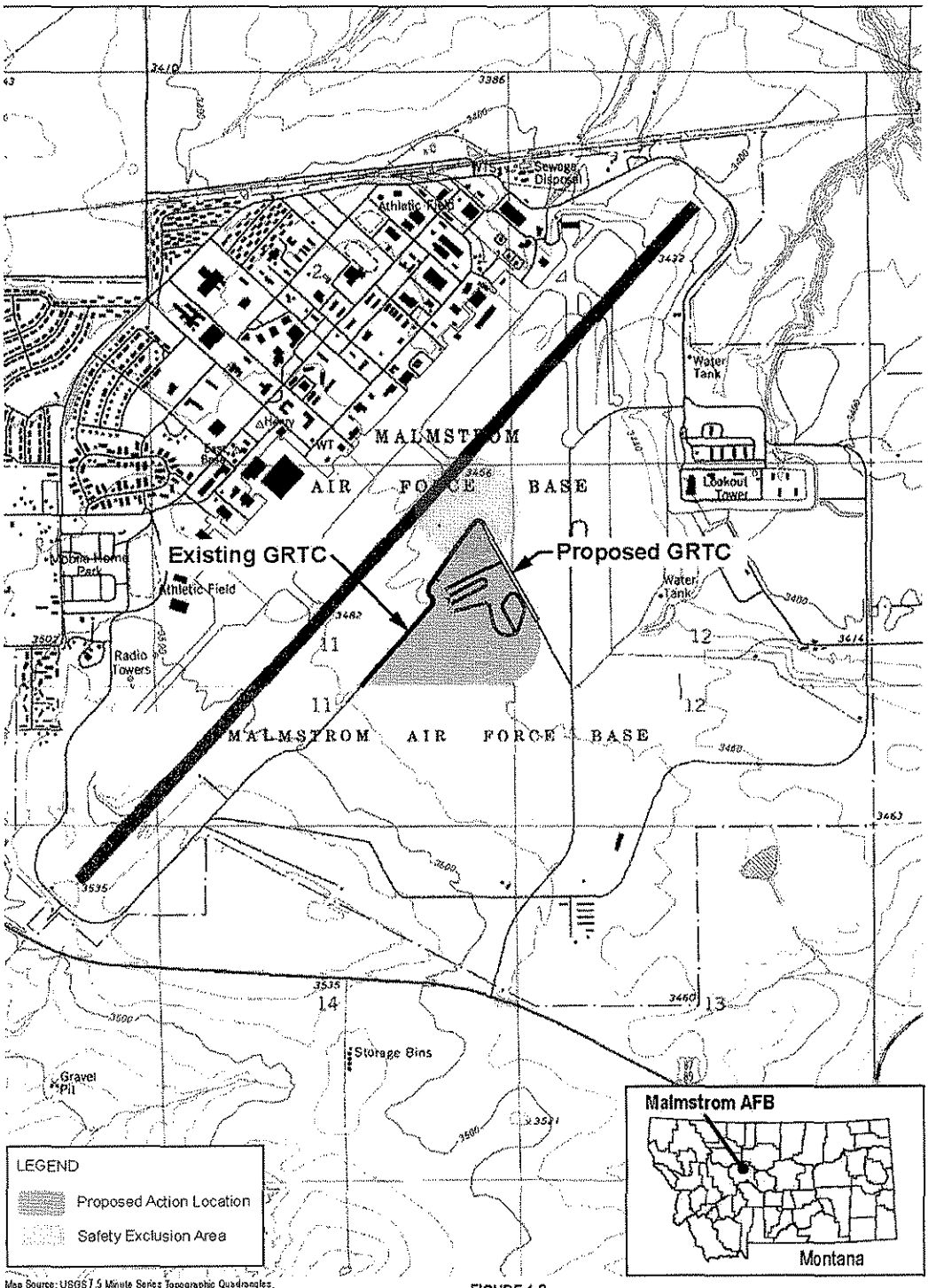

FIGURE 1-2
Proposed Action Location
Environmental Assessment for GRTC Extension, Malmstrom AFB
CH2MHILL

1

United States Department of the Interior
Fish and Wildlife Service

Ecological Services
Montana Field Office
585 Shepard Way
Helena, Montana 59601-6287
Phone: (406) 449-5225 Fax: (406) 449-5339

12/21/2009

Mr. Christopher Murphy, E.I.
Environmental Engineer
341 CES/CEAO
39 78th Street North
Malmstrom AFB, MT 59402-7536

Dear Mr. Murphy:

We have reviewed the brief project description in your December 21, 2009 cover letter, along with the attached map and drawing for the proposed 1-mile extension to the Gravel Road Training Course, on Malmstrom AFB, east of Great Falls, Montana. Our determination is that due to the nature of the project, as well as its location, it is unlikely to have any significant adverse effects upon fish, wildlife, or habitat resources under the purview of the U.S. fish and Wildlife Service.

Please telephone me at 406/449-5225, ext. 205, if you have any questions regarding this matter.

Sincerely,

R. Mark Wilson

R. Mark Wilson
Field Supervisor

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 341ST MISSILE WING (AFGSC)

December 15, 2009

MEMORANDUM FOR: Mr. Richard Opper, Director
Montana Department of Environmental Quality
PO Box 200901
Helena, Montana 59620-0901

FROM: 341 CES/CEAO
39 78th Street North
Malmstrom AFB, Montana 59402-7536

SUBJECT: Proposed Gravel Road Training Course Extension, Malmstrom Air Force Base (MAFB), Montana

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3. Please contact Christopher Murphy, EA Project Manager, Malmstrom AFB at (406) 731-6369 or via email at christopher.murphy@malmstrom.af.mil with any questions or concerns.

CHRISTOPHER J. MURPHY, E.I.
Environmental Engineer

Figure 1: Preferred Site Locations

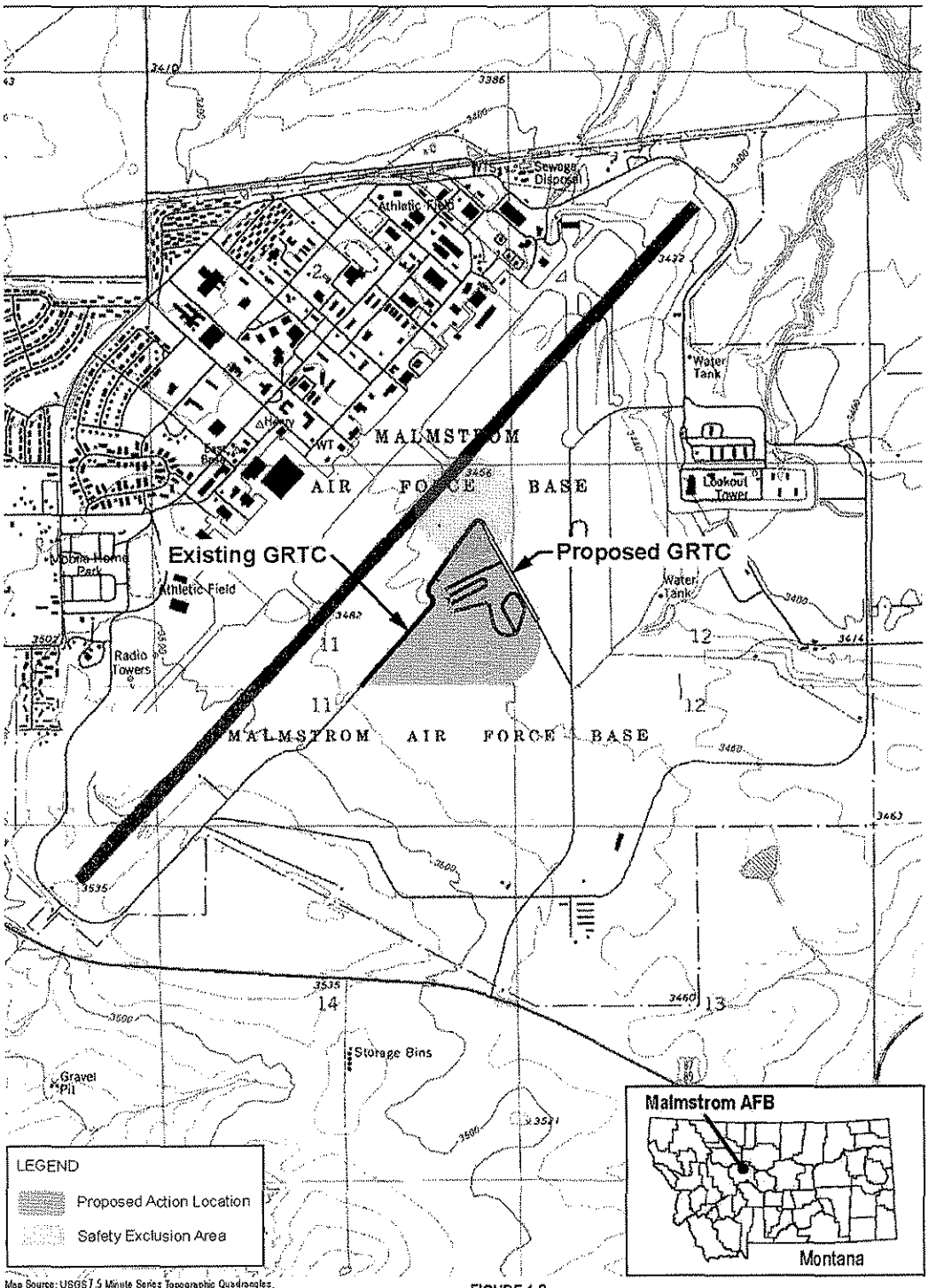

FIGURE 1-2
Proposed Action Location
Environmental Assessment for GRTC Extension, Malmstrom AFB
CH2MHILL

1

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 341ST MISSILE WING (AFGSC)

January 11, 2010

Dr. Mark Baumler, SHPO
State Historic Preservation Office
PO Box 201202
1410 8th Avenue
Helena, Montana 59620-1202

Subject: Gravel Road Training Course Extension Project, Malmstrom AFB, Great Falls

Dear Dr. Baumler:

Pursuant to regulations found at 36 CFR 800 we request Montana State Historic Preservation Office (SHPO) review and concurrence of the following project recommendations for the gravel road training course (GRTC) extension on Malmstrom Air Force Base (MAFB) in Great Falls, Montana (MT).

Project Description and Area of Potential Effect (APE)
The United States Air Force proposes to construct a one-mile extension of the existing GRTC at MAFB in Great Falls, Cascade County, MT. The proposed undertaking is located on lands administered by the Air Force. The purpose of the GRTC extension is to provide a realistic driving range simulating the challenging conditions found throughout the Missile Complex, a 13,800-square mile area in central MT. The proposed new course would include features present in the Missile Complex, such as different road surfaces, cattle guards, and switchbacks; the existing course does not include such training scenarios.

Only one site was found on MAFB that is of the required size and proximity to the existing course and that does not conflict with existing or proposed land uses or safety exclusion zones. This site is located on Malmstrom located in the NE ¼ of Section 11 and SW ¼ of Section 12, Township 20 North Range 4 East. Figure 1 shows the project site location. The APE is defined as the entire 1 mile site, since the entirety of the site has the potential to undergo ground disturbance and construction activities (see attached Figure 2). The Air Force believes that the APE as defined, adequately considers all reasonable potential effects to Historic Properties from this proposed undertaking.

Summary of Existing Cultural Resource Studies and Directives
In brief, the entire base has been inventoried for cultural resources by Historical Research Associates in 1988 and 1989, by Argonne National Laboratory in 1994-5, and by CH2M HILL in 1997. Many areas of the Base, including the Preferred Site, are characterized by heavy prior ground disturbances, excavation for missile sites and bunkers, and built-environment structures. A few pre-contact or ethno-historic sites and isolates were observed and documented during these field studies, none are located within the Preferred Site and all were recommended as Not

Eligible for the National Register of Historic Places (NRHP). All historic buildings and structures on the base were inventoried during 1994-5 and 1997 cultural resource studies. Historic WWII era structures, Cold War Era structures, and railroad segments are located on or adjacent to the Base, none are located within the Preferred Site.

In addition to these studies, a Programmatic Agreement (PA) was drawn up in 2002 regarding Exterior Maintenance of Missile Alert Facility Alpha-01 and Launch Facility Alpha-06, and a Memorandum of Agreement (MOA) addressing 564th III Minuteman Missile Squadron was completed in 2007. These directives were designed to adequately protect and preserve significant historic properties. Finally, an Integrated Cultural Resource Management Plan (ICRMP) for the Base was recently prepared and will be implemented on the Base.

Tribal Coordination
We initiated consultation with the Blackfeet Nation THPO, the Chippewa Cree of Rocky Boys Reservation THPO, Confederated Salish and Kootenai Tribes of the Flathead Indian Nation, the Fort Belknap Community, the Crow Tribes of Montana, and the Fort Peck/Tribes. We await responses from these Tribal groups and will address any questions or concerns they may have about this project.

Request for Concurrence and Input
We believe that the cultural resource studies, inventories, and reports along with the ICRMP, MOA, and PA are comprehensive, thorough, and adequate and we agree with their methods, findings, and recommendations. It is our understanding that the SHPO has concurred with the adequacy of these cultural resource studies. For these reasons, we recommend that no additional cultural resource site investigation is necessary on the MAFB for the GRTC extension project. We request your concurrence or guidance on this matter.

Further, based on our current project description and design, we do not believe that the GRTC extension project will have any effect on NRHP Eligible structures on MAFB. The attached Figure 2 shows the current project layout on the Preferred Site.

Please contact me if you have any questions or concerns.

Sincerely,

CHRISTOPHER J. MURPHY, E.I.
Environmental Engineer

References

Bard, James C. (CH2M HILL, Inc.)
1997 *Base and Missile Cold War Survey: A Baseline Inventory of Cold War Material Culture at Malmstrom Air Force Base, Montana.* Prepared for the Air Force Center for Environmental Excellence, Brooks AFB, Texas. CH2M HILL, Inc: Edgewood, CO.

Greiser, T. Weber (HRA)
1989 *Cultural and Paleontological Resources Survey on and Adjacent to Malmstrom Air Force Base, Great Falls, Montana.* Prepared for the US Air Force under subcontract to Tetra Tech, Inc for contract F04704-85-C-0062. Historical Research Associates: Missoula, MT. (CRABS Document # ZZ 6 10820)

Hoffecker, John F. and Matt Greby
1994 Prehistoric and Historic Resources at Malmstrom Air Force Base: Field Survey Report. Prepared for Air Mobility Command HQ, US Air Force. Argonne National Laboratory: Argonne, Ill. (CRABS Document # CA 6 16151)

HydroGeoLogic, Inc.
2008 *Final Integrated Cultural Resources Management Plan for Malmstrom Air Force Base, Montana.* Prepared for Air Force Center for Environmental Excellence under Contract F41624-03-D-8602 DO 0063. (September 2008)

Memorandum of Agreement
2007 *Memorandum of Agreement Among Malmstrom AFB, the Montana State Historic Preservation Office and The Advisory Council for Historic Preservation Regarding Inactivation of the 564th Minuteman III Missile Squadron.*

Programmatic Agreement
2002 *Programmatic Agreement Between the United States Department of the Air Force and the Montana State Historic Preservation Officer Regarding the Exterior Maintenance of Missile Alert Facility Alpha-01 and Launch Facility Alpha-06 at Malmstrom Air Force Base, Montana.*

Enclosures: Figure 1: Preferred Site Location
Figure 2: Current Site Layout and Plan

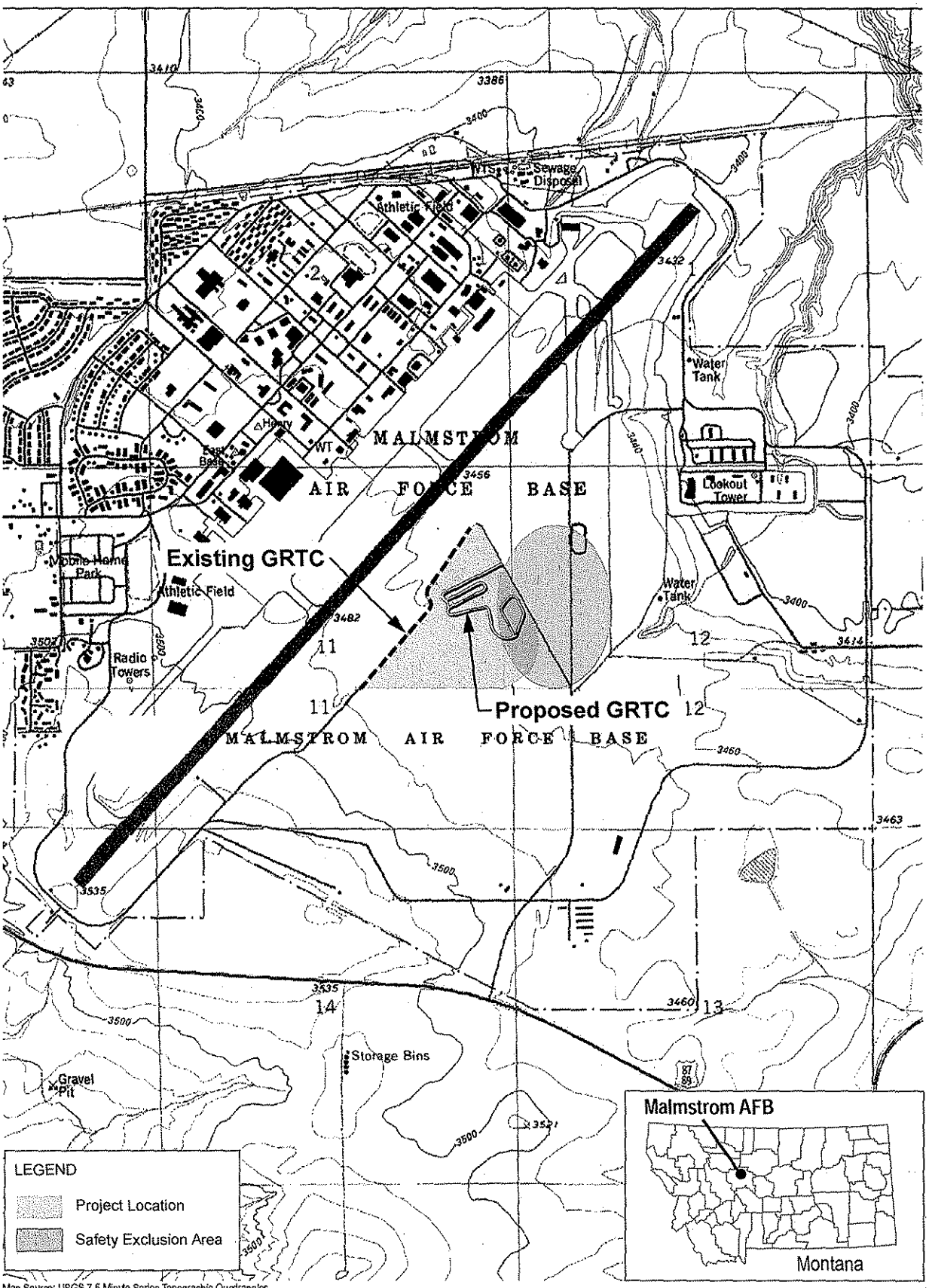

FIGURE 1-3
Project Location
Malmstrom AFB, Great Falls, MT

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CH2MHILL

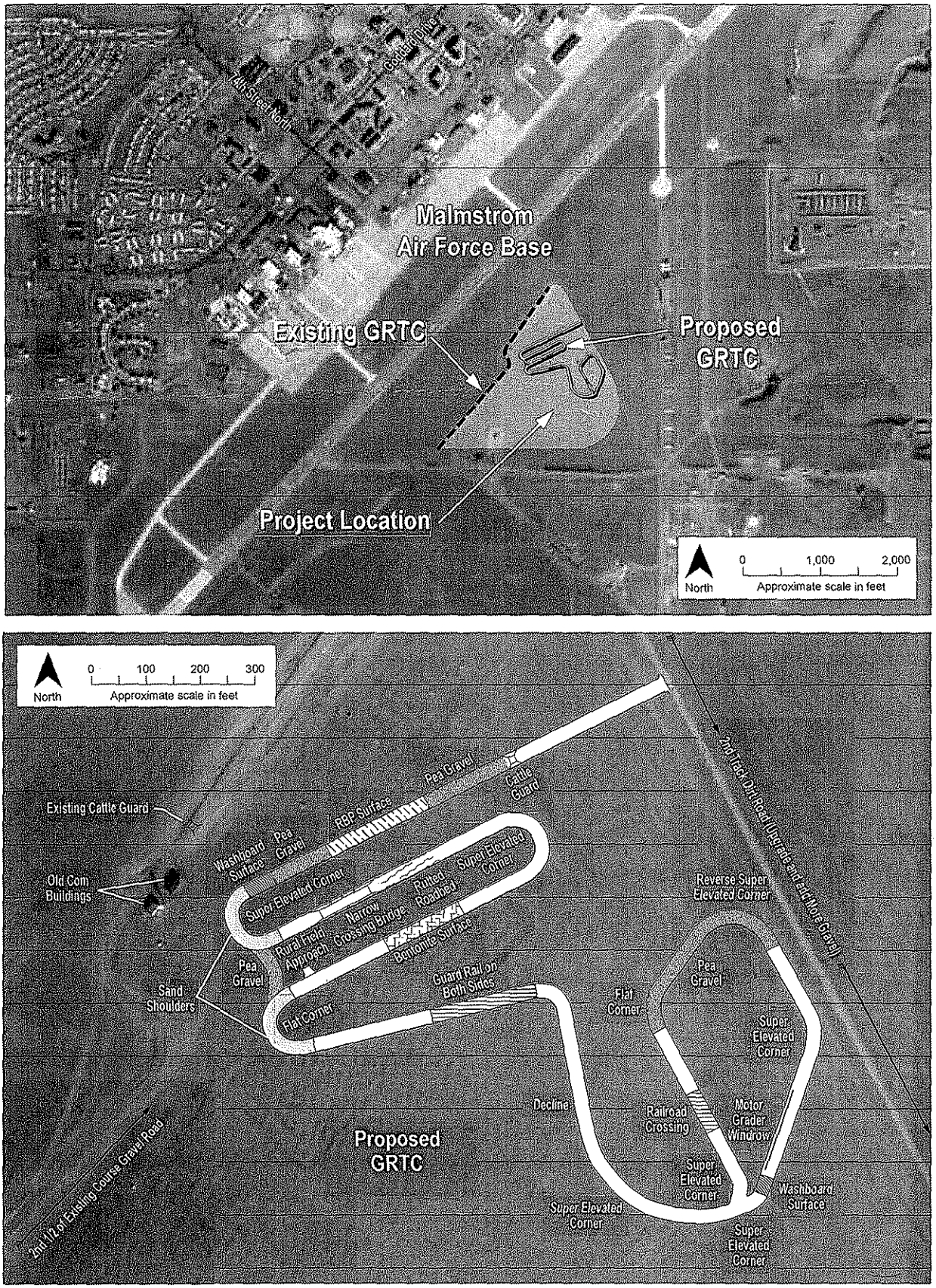

FIGURE 2-1
Existing and Proposed GRTC Layout
Malmstrom AFB, Great Falls, MT

20100111505 59402 Zip Code

RECEIVED
JAN 13 2010
BY: SHPO

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 341ST MISSILE WING (AFGSC)

CONCUR
MONTANA SHPO
DATE 27 Jan 2010 SIGNED

Josef
DOD-Air Force
Gravel Road
Training
Course
Malmstrom
AFB-GF

January 11, 2010

Dr. Mark Baumler, SHPO
State Historic Preservation Office
PO Box 201202
1410 8th Avenue
Helena, Montana 59620-1202

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Please contact me if you have any questions or concerns.

Sincerely,

CHRISTOPHER J. MURPHY, E.I.
Environmental Engineer

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 341ST MISSILE WING (AFGSC)

December 15, 2009

Ms. Marcia Pablo
Tribal Historic Preservation Officer
Confederated Salish and Kootenai Tribes of the Flathead Indian Nation
Tribal Preservation Office
P.O. Box 278
Pablo MT 59855

Subject: Gravel Road Training Course Extension Project, Malmstrom AFB, Great Falls

Dear Chairperson Pablo:

The United States Air Force proposes to construct a one-mile extension of the existing gravel road training course (GRTC) at Malmstrom AFB in Great Falls, Cascade County, MT. The proposed undertaking is located on lands administered by the Air Force. The purpose of the GRTC extension is to provide a realistic driving range simulating the challenging conditions found throughout the Missile Complex, a 13,800-square mile area in central Montana. The proposed new course would include features present in the Missile Complex, such as different road surfaces, cattle guards, and switchbacks; the existing course does not include such training scenarios.

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Please accept this correspondence as notification, as required by the NHPA, as amended, the Archaeological Resources Protection Act of 1979 (ARPA), the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), and the Presidential Executive Order 13175 Consultation and Coordination with Indian Tribal Governments. Per the above regulations, we are assessing what information we need in order to further identify culturally affiliated properties that may be affected by our proposed undertakings.

If United States Air Force activities were to impact cultural resources not previously identified, we will immediately proceed to inform you of the discovery and to invite you to assist the Air Force in the development of procedures for minimizing adverse impacts to the newly discovered cultural resources.

If there are specific individuals that you prefer we contact, please forward the name and method of initiating consultation with this individual, or with your designated tribal representative, traditional religious leader, or preferred NHPA point of contact. We are also contacting officials of other federally recognized tribes in Montana to invite them to consult with us on this issue.

We look forward to working with you or your designated representative. If we do not hear from you within thirty (30) days, we will assume that you concur with our determination and will proceed as discussed above. If you require additional information, please contact, Mr. Christopher Murphy, at (406) 731-6369 or via email at christopher.murphy@malmstrom.af.mil.

Sincerely,

CHRISTOPHER J. MURPHY, E.I.
Environmental Engineer

Enclosures: Figure 1: Preferred Site Location
Figure 2: Current Site Layout and Plan

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 341ST MISSILE WING (AFGSC)

December 15, 2009

Mr. Darrell 'Curley' Youpee, Director
Cultural Resources Department
Fort Peck Tribes
501 Medicine Bear Road
Poplar MT 59255

Subject: Gravel Road Training Course Extension Project, Malmstrom AFB, Great Falls

Dear Mr. Youpee:

The United States Air Force proposes to construct a one-mile extension of the existing gravel road training course (GRTC) at Malmstrom AFB in Great Falls, Cascade County, MT. The proposed undertaking is located on lands administered by the Air Force. The purpose of the GRTC extension is to provide a realistic driving range simulating the challenging conditions found throughout the Missile Complex, a 13,800-square mile area in central Montana. The proposed new course would include features present in the Missile Complex, such as different road surfaces, cattle guards, and switchbacks; the existing course does not include such training scenarios.

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Sincerely,

CHRISTOPHER J. MURPHY, E.I.
Environmental Engineer

Enclosures: Figure 1: Preferred Site Location
Figure 2: Current Site Layout and Plan

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 341ST MISSILE WING (AFGSC)

December 15, 2009

Ms. Julia Doney, President
Fort Belknap Indian Community
RR1, Box 66
Harlem MT 59526

Subject: Gravel Road Training Course Extension Project, Malmstrom AFB, Great Falls

Dear Ms. Doney:

The United States Air Force proposes to construct a one-mile extension of the existing gravel road training course (GRTC) at Malmstrom AFB in Great Falls, Cascade County, MT. The proposed undertaking is located on lands administered by the Air Force. The purpose of the GRTC extension is to provide a realistic driving range simulating the challenging conditions found throughout the Missile Complex, a 13,800-square mile area in central Montana. The proposed new course would include features present in the Missile Complex, such as different road surfaces, cattle guards, and switchbacks; the existing course does not include such training scenarios.

Only one site was found on MAFB that is of the required size and proximity to the existing course and that does not conflict with existing or proposed land uses or safety exclusion zones. This site is located on Malmstrom located in the NE ¼ of Section 11 and SW ¼ of Section 12, Township 20 North Range 4 East. Figure 1 shows the project site location. The APE is defined as the entire 1 mile site, since the entirety of the site has the potential to undergo ground disturbance and construction activities (see attached Figure 2). The Air Force believes that the APE as defined, adequately considers all reasonable potential effects to Historic Properties from this proposed undertaking.

In brief, the entire base has been inventoried for cultural resources by Historical Research Associates in 1988 and 1989, by Argonne National Laboratory in 1994-5, and by CH2M HILL in 1997. Many areas of the Base, including the Preferred Site, are characterized by heavy prior ground disturbances, excavation for missile sites and bunkers, and built-environment structures. A few pre-contact or ethno-historic sites and isolates were observed and documented during these field studies, none are located within the Preferred Site and all were recommended as Not Eligible for the NRHP. All historic buildings and structures on the base were inventoried during 1994-5 and 1997 cultural resource studies. Historic WWII era structures, Cold War Era structures, and railroad segments are located on or adjacent to the Base, and, although some have been determined Eligible for the NRHP, none are located within the Preferred Site.

In addition to these studies, a Programmatic Agreement (PA) was drawn up in 2002 regarding Exterior Maintenance of Missile Alert Facility Alpha-01 and Launch Facility Alpha-06, and a Memorandum of Agreement (MOA) addressing 564th III Minuteman Missile Squadron was

completed in 2007. These directives were designed to adequately protect and preserve significant historic properties on the Base. Finally, an Integrated Cultural Resource Management Plan (ICRMP) for the Base was recently prepared in September of 2008 and will be implemented on the Base.

Please accept this correspondence as notification, as required by the NHPA, as amended, the Archaeological Resources Protection Act of 1979 (ARPA), the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), and the Presidential Executive Order 13175 Consultation and Coordination with Indian Tribal Governments. Per the above regulations, we are assessing what information we need in order to further identify culturally affiliated properties that may be affected by our proposed undertakings.

If United States Air Force activities were to impact cultural resources not previously identified, we will immediately proceed to inform you of the discovery and to invite you to assist the Air Force in the development of procedures for minimizing adverse impacts to the newly discovered cultural resources.

If there are specific individuals that you prefer we contact, please forward the name and method of initiating consultation with this individual, or with your designated tribal representative, traditional religious leader, or preferred NHPA point of contact. We are also contacting officials of other federally recognized tribes in Montana to invite them to consult with us on this issue.

We look forward to working with you or your designated representative. If we do not hear from you within thirty (30) days, we will assume that you concur with our determination and will proceed as discussed above. If you require additional information, please contact, Mr. Christopher Murphy, at (406) 731-6369 or via email at christopher.murphy@malmstrom.af.mil.

Sincerely,

CHRISTOPHER J. MURPHY, E.I.
Environmental Engineer

Enclosures: Figure 1: Preferred Site Location
Figure 2: Current Site Layout and Plan

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 341ST MISSILE WING (AFGSC)

December 15, 2009

Mr. George Reed
NAGPRA Coordinator
Crow Tribe of MT
P.O. Box 214
St. Xavier MT 59075

Subject: Gravel Road Training Course Extension Project, Malmstrom AFB, Great Falls

Dear Mr. Reed:

The United States Air Force proposes to construct a one-mile extension of the existing gravel road training course (GRTC) at Malmstrom AFB in Great Falls, Cascade County, MT. The proposed undertaking is located on lands administered by the Air Force. The purpose of the GRTC extension is to provide a realistic driving range simulating the challenging conditions found throughout the Missile Complex, a 13,800-square mile area in central Montana. The proposed new course would include features present in the Missile Complex, such as different road surfaces, cattle guards, and switchbacks; the existing course does not include such training scenarios.

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Sincerely,

CHRISTOPHER J. MURPHY, E.I.
Environmental Engineer

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Figure 2: Current Site Layout and Plan

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 341ST MISSILE WING (AFGSC)

December 15, 2009

Alvin Windy Boy
Tribal Historic Preservation Officer
Rocky Boys Reservation
RR 1, Box 917
Box Elder MT 59521

Subject: Gravel Road Training Course Extension Project, Malmstrom AFB, Great Falls

Dear Mr. Windy Boy:

The United States Air Force proposes to construct a one-mile extension of the existing gravel road training course (GRTC) at Malmstrom AFB in Great Falls, Cascade County, MT. The proposed undertaking is located on lands administered by the Air Force. The purpose of the GRTC extension is to provide a realistic driving range simulating the challenging conditions found throughout the Missile Complex, a 13,800-square mile area in central Montana. The proposed new course would include features present in the Missile Complex, such as different road surfaces, cattle guards, and switchbacks; the existing course does not include such training scenarios.

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Environmental Engineer

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Figure 2: Current Site Layout and Plan

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 341ST MISSILE WING (AFGSC)

December 15, 2009

Mr. John Murray
Tribal Historic Preservation Officer
Blackfeet Nation
P.O. Box 2809/527
Browning MT 59417

Subject: Gravel Road Training Course Extension Project, Malmstrom AFB, Great Falls

Dear Mr. Murray:

The United States Air Force proposes to construct a one-mile extension of the existing gravel road training course (GRTC) at Malmstrom AFB in Great Falls, Cascade County, MT. The proposed undertaking is located on lands administered by the Air Force. The purpose of the GRTC extension is to provide a realistic driving range simulating the challenging conditions found throughout the Missile Complex, a 13,800-square mile area in central Montana. The proposed new course would include features present in the Missile Complex, such as different road surfaces, cattle guards, and switchbacks; the existing course does not include such training scenarios.

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CHRISTOPHER J. MURPHY, E.I.
Environmental Engineer

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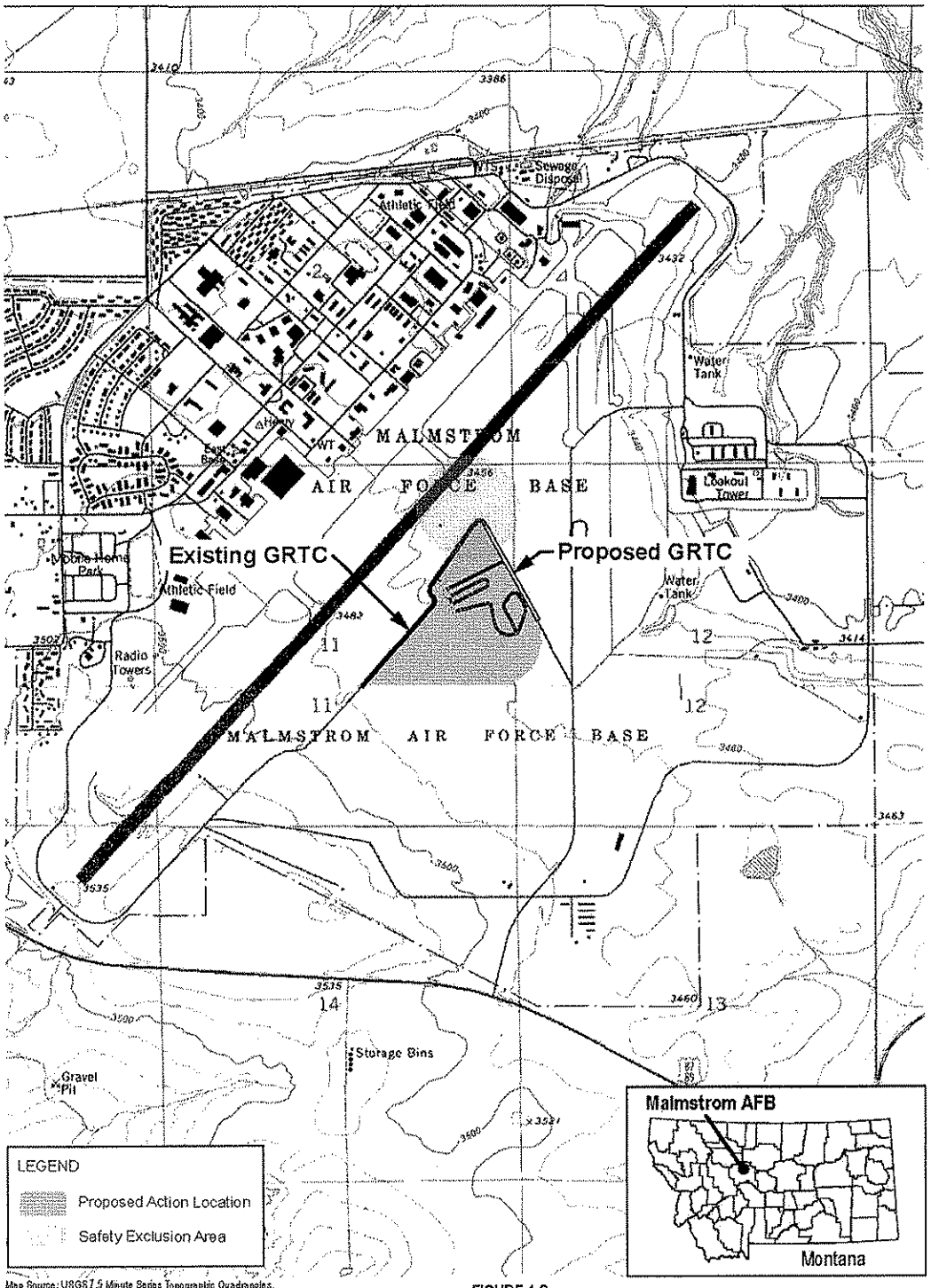

FIGURE 1-2
Proposed Action Location
Environmental Assessment for GRTC Extension, Malmstrom AFB

CH2MHILL

ES091709173711GBAO

1

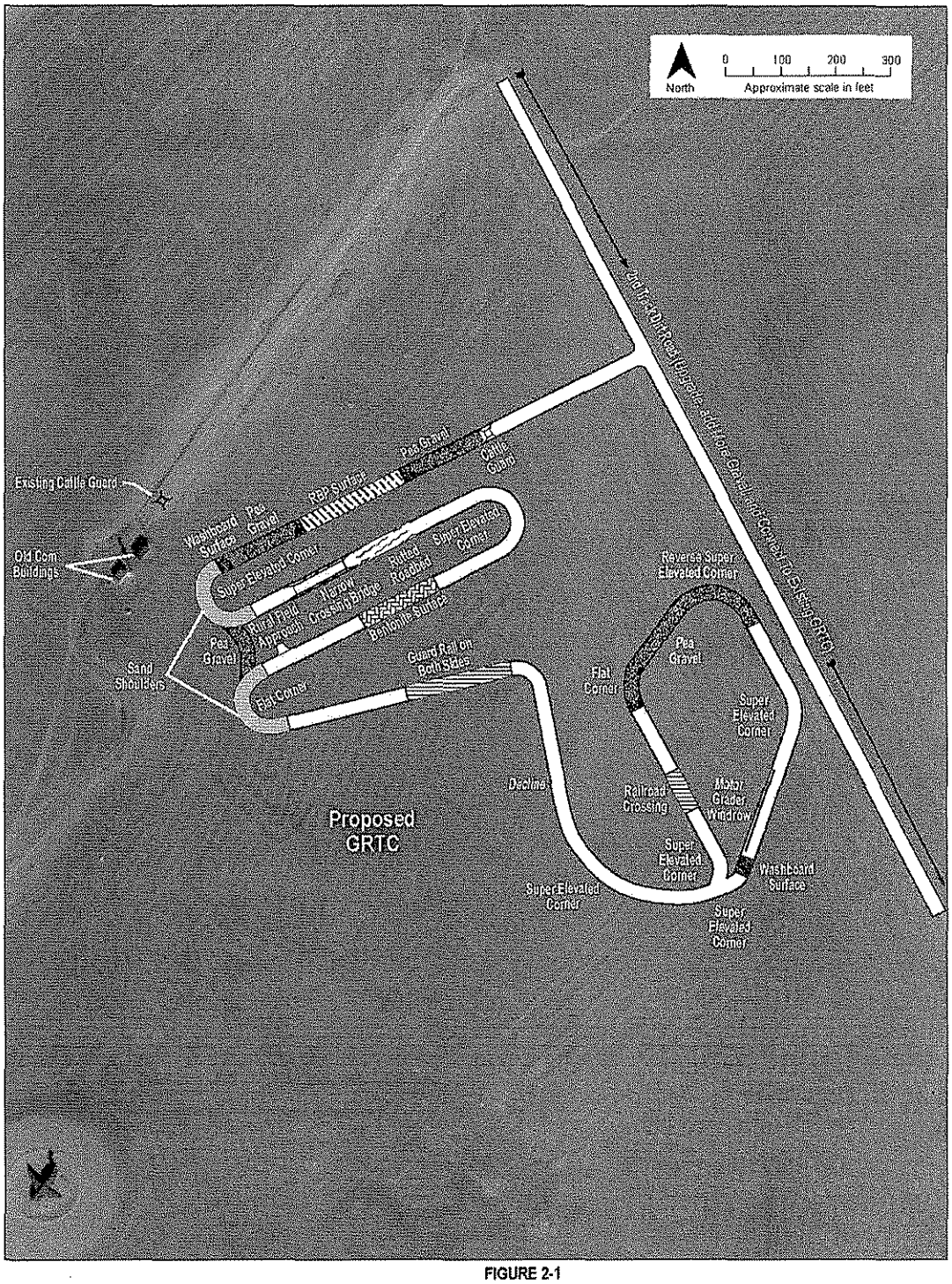

FIGURE 2-1
Existing and Proposed GRTC Layout
Environmental Assessment for GRTC Extension, Malmstrom AFB

ES091709173711GBAO

CH2MHILL

1